Odsek Visoka ICT škola, Akademija tehničko-umetničkih strukovnih studija, Beograd

# officeware

http://officeware.epizy.com/

Smer: Internet tehnologije

Modul: Web programiranje

Predmet: Web programiranje PHP 1

Mihailo Ilić 41/19

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## 1. Uvod

## 1.1 Korišćeni programski jezici/tehnologije

Za potrebe sajta korišćene su sledeće tehnologije:

- HTML
- CSS + SASS
- Bootstrap (samo CSS) + Font Awesome
- JavaScript + jQuery
- PHP
- Xampp + MySQL
- jQuery plugin slick
- Visual Studio Code
- Photoshop

## 1.2 Opis funkcionalnosti

Funkcionalnosti sajta se mogu svrstati u sledeće kategorije:

- Dinamičko učitavanje navigacije iz baze, u ovo ulaze i linkovi posvećeni administratorskim nalozima
- Slajder sa slikama koje se učitavaju dinamički iz baze
- Dinamička prodavnica sa dinamičkom stranicom o izabranom proizvodu, a sadržaj se preuzima iz baze
- Filtriranje, pretraga, sortiranje i straničenje proizvoda na stranici za prodavnicu, sve se obavlja jednim upitom na osnovu izabranih kriterijuma
- Korpa koja je povezana sa korisničkim nalogom, sa ukupnom sumom i opcijama za brisanje i izmenu količine
- Registracija i logovanje od strane korisnika, sve se proverava regularnim izrazima, a sve stranice za korisnike/administratore su zaštićene od neautorizovanih posetilaca
- Stranica o nalogu korisnika gde korisnik može videti svoje informacije i promeniti lozinku
- Anketa gde korsnici glasaju, a administratori imaju uvid o tome koliko je glasova dobila koja opcija
- Kontakt forma ime i imejl adresa se automatski popunjavaju ako je korisnik ulogovan, a administratori imaju uvid u poruke poslate kroz ovu formu
- Administratorske funkcionalnosti, obuhvataju stranice gde administratori mogu dodavati i brisati kategorije, brendove, proizvode itd., a takođe imaju uvid i opcije vezane za korisničke naloge, poruke i anketu
- Forma za dodavanje i izmenjivanje proizvoda, uključujući i uploadovanje slike, a unos se proverava i na klijentu i na serveru regularnim izrazima
- Učitavanje iz zasebnog php fajla navigacije, futera, i sadržaja head taga, kao i mnogih funkcionalnosti PHP koda koje se ponavljaju

## 1.2 Template

Za izradu sajta nije korišćeno gotovo rešenje. Sve funkcionalnosti i kod su napisani ispočetka.

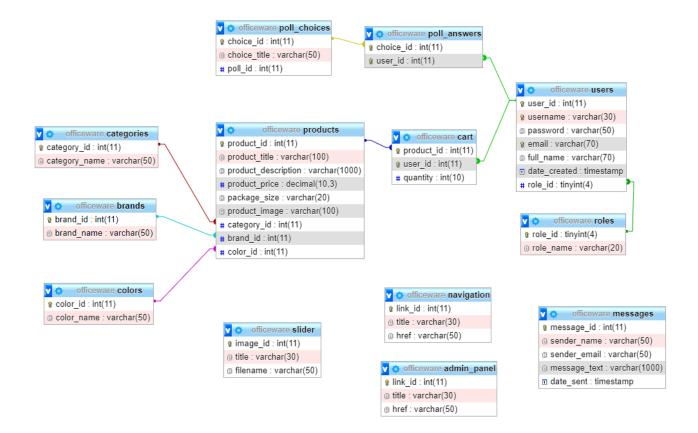
## 2. Organizacija

## 2.1 Organizaciona šema i šema baze podataka

Skoro svim stranicama je dozvoljen pristup sa bilo kog mesta u zavisnosti od autorizacije.

Ovo su stranice sa kojima to nije slučaj:

- product.php Dostupna preko stranice shop.php, kada se klikne na određni proizvod
- admin-product-edit.php Dostupna preko stranice admin-products.php (admin panel) ili product.php (proizvod iz prodavnice), u zavisnosti da li administrator dodaje novi proizvod ili izmenjuje postojeći
- poll.php Dostupna preko stranice index.php



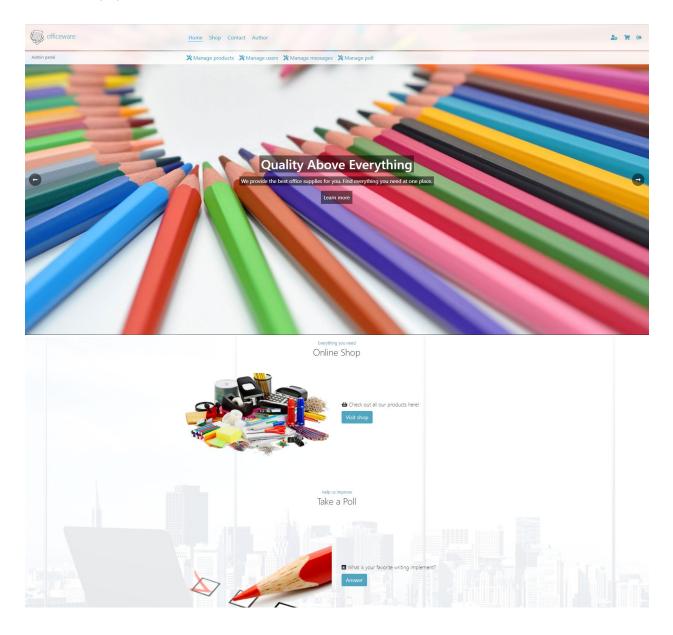
### 2.2 Mapa sajta

```
<?xml version="1.0" encoding="UTF-8"?>
<urlset xmlns="http://www.sitemaps.org/schemas/sitemap/0.9">
<url>
  <loc>http://officeware.epizy.com/</loc>
  <lastmod>2020-03-08</lastmod>
  <changefreq>weekly</changefreq>
  <priority>0.9</priority>
</url>
<url>
  <loc>http://officeware.epizy.com/shop.php</loc>
  <lastmod>2020-03-08</lastmod>
  <changefreq>daily</changefreq>
  <priority>1</priority>
</url>
<url>
  <loc>http://officeware.epizy.com/product.php</loc>
  <lastmod>2020-03-08</lastmod>
 <changefreq>daily</changefreq>
  <priority>1</priority>
</url>
<url>
  <loc>http://officeware.epizy.com/account.php</loc>
  <lastmod>2020-03-08</lastmod>
  <changefreq>monthly</changefreq>
  <priority>0.6</priority>
</url>
<url>
  <loc>http://officeware.epizy.com/admin-messages.php</loc>
  <lastmod>2020-03-08</lastmod>
  <changefreq>monthly</changefreq>
  <priority>0.6</priority>
</url>
<url>
  <loc>http://officeware.epizy.com/admin-products.php</loc>
  <lastmod>2020-03-08</lastmod>
  <changefreq>monthly</changefreq>
  <priority>0.6</priority>
</url>
<url>
  <loc>http://officeware.epizy.com/admin-product-edit.php</loc>
  <lastmod>2020-03-08</lastmod>
  <changefreq>daily</changefreq>
  <priority>0.6</priority>
</url>
<url>
```

```
<loc>http://officeware.epizy.com/admin-users.php</loc>
  <lastmod>2020-03-08</lastmod>
  <changefreq>monthly</changefreq>
 <priority>0.6</priority>
</url>
<url>
  <loc>http://officeware.epizy.com/admin-poll.php</loc>
  <lastmod>2020-03-08</lastmod>
 <changefreq>monthly</changefreq>
  <priority>0.6</priority>
</url>
<url>
  <loc>http://officeware.epizy.com/cart.php</loc>
 <lastmod>2020-03-08</lastmod>
  <changefreq>daily</changefreq>
  <priority>0.9</priority>
</url>
<url>
  <loc>http://officeware.epizy.com/login.php</loc>
 <lastmod>2020-03-08</lastmod>
 <changefreq>yearly</changefreq>
  <priority>0.9</priority>
</url>
<url>
  <loc>http://officeware.epizy.com/register.php</loc>
 <lastmod>2020-03-08</lastmod>
 <changefreq>yearly</changefreq>
  <priority>0.9</priority>
</url>
<url>
  <loc>http://officeware.epizy.com/poll.php</loc>
 <lastmod>2020-03-08</lastmod>
 <changefreq>weekly</changefreq>
 <priority>0.9</priority>
</url>
<url>
  <loc>http://officeware.epizy.com/contact.php</loc>
  <lastmod>2020-03-08</lastmod>
 <changefreq>yearly</changefreq>
 <priority>0.6</priority>
</url>
<url>
  <loc>http://officeware.epizy.com/author.php</loc>
 <lastmod>2020-03-08</lastmod>
 <changefreq>yearly</changefreq>
 <priority>0.4</priority>
</url>
</urlset>
```

## 2.3 Slike stranica i opisi funkcionalnosti

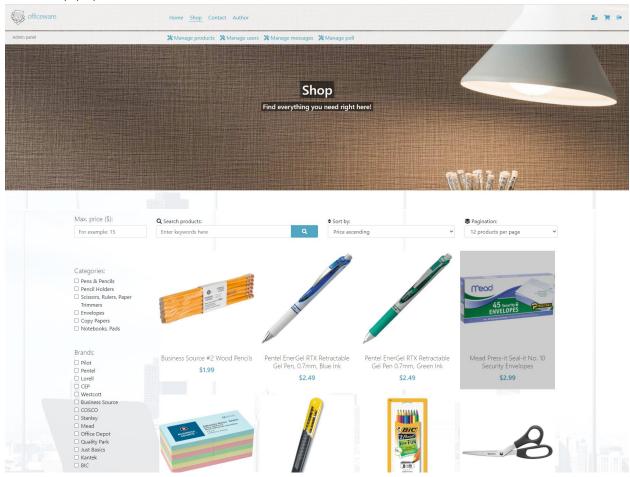
#### 2.3.1 index.php



Na ovoj stranici se nalazi slajder (slick - jQuery plugin), za koji su slajdovi dinamički učitani iz baze. Takođe, ovde se nalaze linkovi ka prodavnici i anketi. Ako korisnik nije prijavljen dugme za anketu je lažno i na klik će se samo pojaviti linkovi za login ili registraciju.

Navigacija i admin panel (ako je nalog administratorski) su učitani iz baze, a tu su i linkovi ka korpi i informacijama o nalogu, kao i link za odjavu (naravno, samo ako je korisnik ulogovan).

#### 2.3.2 shop.php



#### Na dnu:

Na ovoj stranici se mogu videti svi proizvodi. Sve kategorije, brendovi, boje i sami proizvodi se čitaju iz baze. Ovo se realizuje preko AJAX-a.

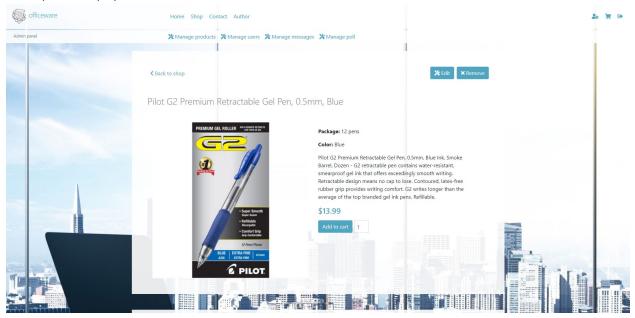
Moguće je filtriranje po kategorijama, brendovima, bojama i ceni. Tu je i mogućnost sortiranja, pretrage i straničenja (12, 24, i bez straničenja).

Za sve ove kriterijume na serveru se priprema poseban upit bazi nadovezivanjem stringova, i tako se jednim upitom dobijaju svi željeni podaci, a lista se osvežava prilikom svake interakcije korisnika sa ovim poljima.

Serveru se inicijalno traži prva stranica, a server nazad vraća koliko zapravo stranica postoji i tako se dinamički kreiraju linkovi ka ostalim stranicama (ukoliko ih ima).

Klikom na proizvod odlazi se na stranicu za više informacija o tom proizvodu.

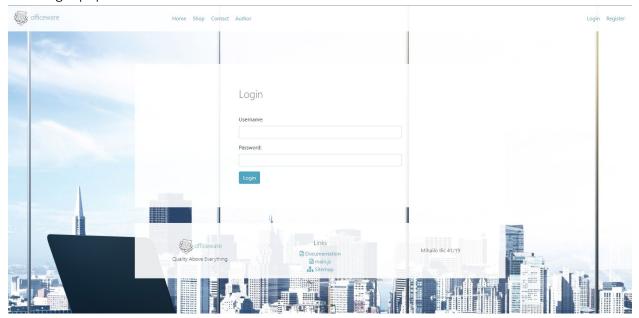
#### 2.3.3 product.php



Ova stranica se dinamički popunjava u zavisnosti od toga koji je proizvod izabran. ID se čita preko GET superglobalne promenljive, a to se dalje obrađuje preko JavaScripta i AJAX-a.

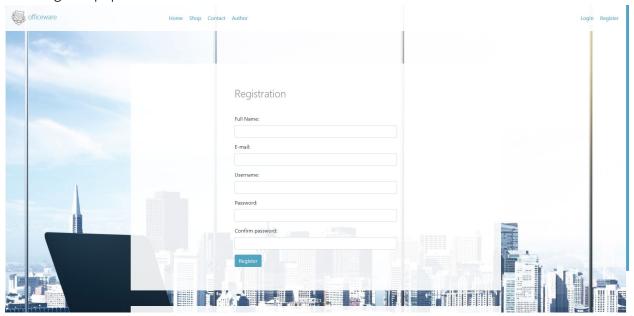
Postoji i opcija za dodavanje u korpu zajedno sa količinom, a ako korisnik nije ulogovan onda je to dugme lažno i samo izdaje obaveštenje da se posetilac mora ulogovati ili registrovati.

## 2.3.4 login.php



Na ovoj stranici posetioci se mogu ulogovati, a kredencijali se proveravaju na serveru. Polja se takođe proveravaju JavaScriptom kako se ne bi slali bespotrebni zahtevi ka serveru.

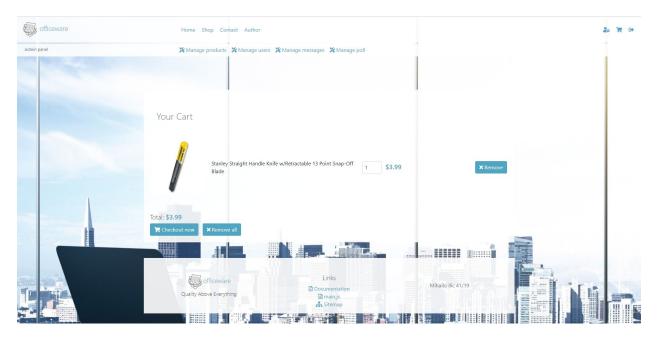
## 2.3.5 register.php



Ovde se vrši registracija novih korisnika, sva polja se proveravaju regularnim izrazima na oba kraja. Takođe ne mogu se registrovati dva naloga sa istim korisničkim imenom ili imejl adresom, a krajnji korisnik će biti obavešten o ishodu registracije.

Ako je sve ispravno upisuju se podaci u bazu korišćenjem addslashes i bindParam, radi veće sigurnosti. A lozinke se upisuju samo kao md5 kriptografija.

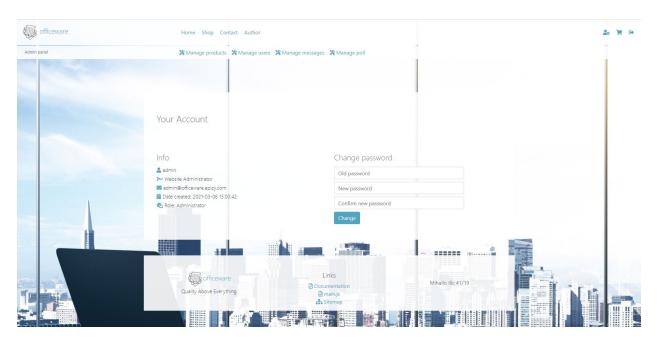
## 2.3.6 cart.php



Na ovoj stranici se vidi sadržaj korpe korisnika (ako nema proizvoda u korpi onda se izdaje takva poruka).

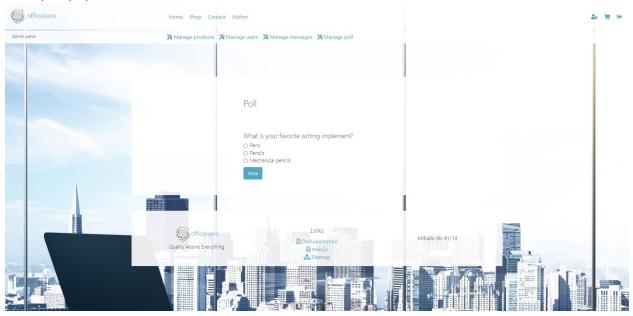
Sadržaj se čita iz baze preko AJAX-a, a preko njega se realizuju i sve ostale funkcionalnosti vezane za korpu, kao što je brisanje ili izmena količine.

## 2.3.7 account.php



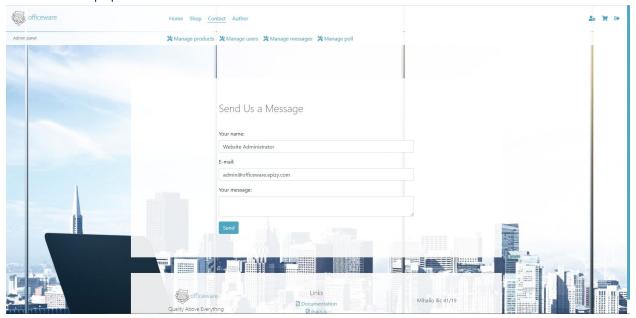
Na ovoj stranici ispisuju se informacije o korisničkom nalogu, a korisniku se takođe nudi promena lozinke. Provera se vrši regularnim izrazima na obe strane.

## 2.3.8 poll.php



Na ovoj stranici korisnicima je omogućeno da učestvuju u anketi, ali samo jednom (vrši se provera select upitom). Uvid u glasove je moguć samo administratorima.

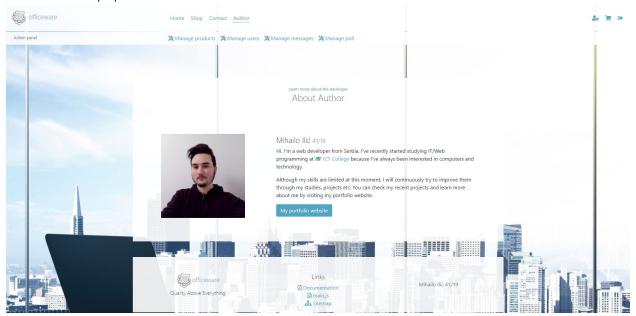
## 2.3.9 contact.php



Slanje poruka administratorima sajta moguće je kroz ovu kontakt formu. Ulogovanim korisnicima se automatski popunjavaju ime i imejl adresa. Sadržaj ovih polja proverava se regularnim izrazima na oba kraja.

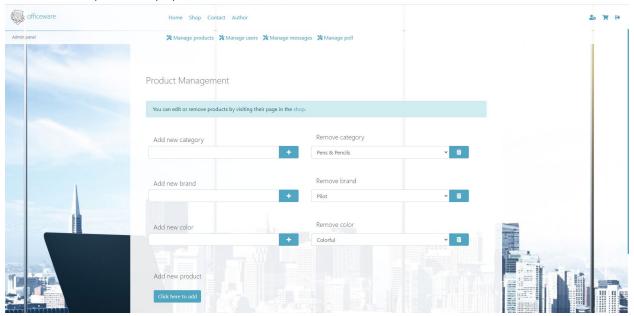
Administratori poseduju posebnu stranicu za pregled ovih poruka.

## 2.3.10 author.php



Ne postoji nikakva posebna funkcionalnost na ovoj stranici.

#### 2.3.11 admin-products.php

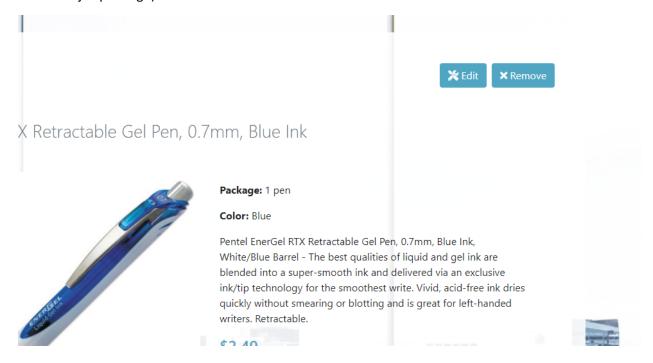


Ova stranica, kao i sve naredne, namenjena je administratoru. Svaki neautorizovani pristup preko URL adrese sprečava se redirekcijom ka stranici index.php.

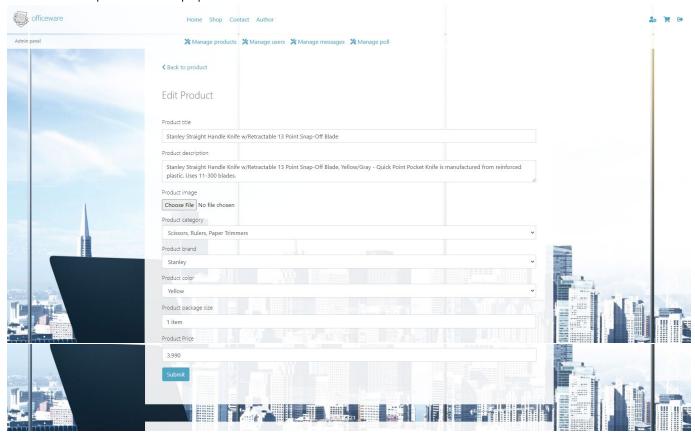
Ovde se mogu dodati nove kategorije, brendovi i boje, a pored se nalaze popunjene dropdown liste za brisanje istih (moguće samo ako se ne nalaze ni na jednom proizvodu).

Klikom na dugme za dodavanje proizvoda odlazi se na stranicu admin-product-edit.php.

Za izmenjivanje i brisanje proizvoda neophodno je locirati ih u prodavnici (što je ujedno i lakše, jer postoje opcije za filtriranje i pretragu).



#### 2.3.12 admin-product-edit.php

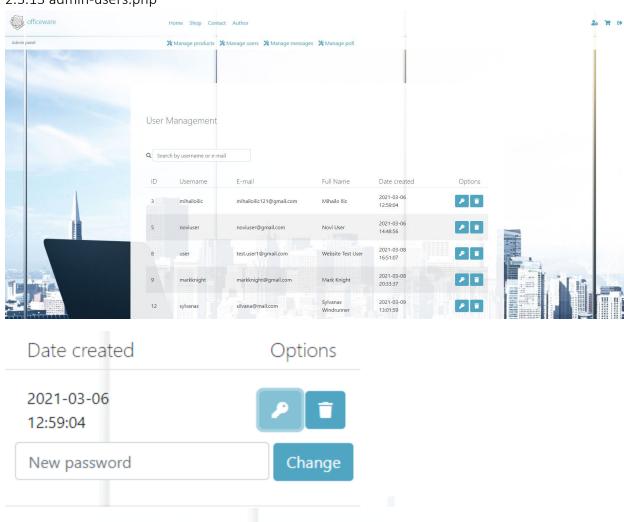


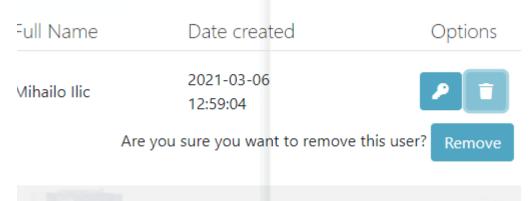
Na ovoj stranici administratori mogu izmenjivati ili dodati novi proizvod, a ta operacija je upisana u GET superglobalnu promenljivu.

Ako se proizvod izmenjuje onda su sva polja već popunjena pa samo treba promeniti željenu stavku i nije neophodno uploadovati sliku (što je obavezno za nove proizvode).

Sva validacija se vrši regularnim izrazima na obe strane i informacije se upisuju u bazu pomoću bindParam, nad kojim je prethodno izvršena funkcija addslashes.

#### 2.3.13 admin-users.php

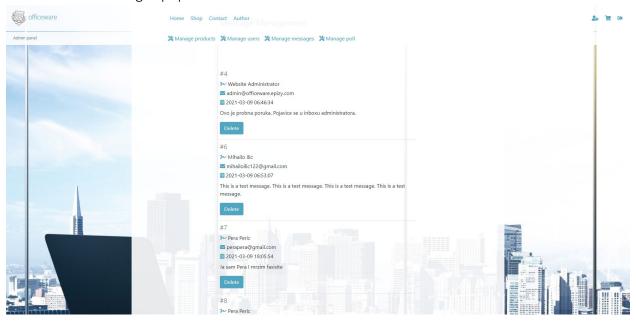




Na ovoj stranici administratori mogu da vide informacije o svim nalozima koji nisu administratorski, i da vrše pretragu istih preko korisničkog imena ili imejl adrese.

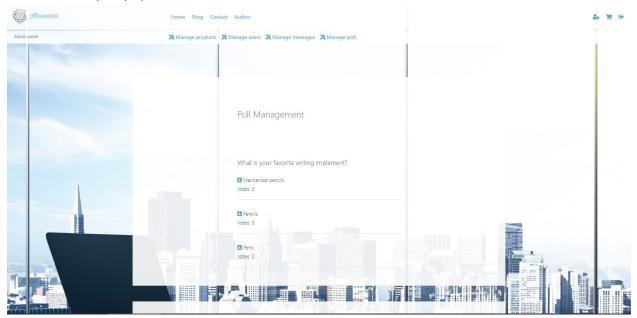
Takođe su ponuđene opcije za jednostavnu promenu lozinke i brisanje naloga.

## 2.3.14 admin-messages.php



Na ovoj stanici administratorima se prikazuju sve poruke poslate kroz kontakt formu, zajedno sa datumom slanja i opcijom brisanja konkretne poruke.

## 2.3.15 admin-poll.php



Na ovoj stranici administratori imaju uvid u to koliko je ljudi glasalo za koju opciju iz ankete.

#### 3. Kodovi

#### 3.1 PHP

#### 3.1.1 index.php

```
<?php
   require_once("config/connection.php");
   require once("models/session.php");
   require_once("models/functions.php");
   require_once("views/head.php");
   require_once("views/nav.php");
?>
    <main id="home" class="container-fluid position-relative bg-light-trans mx-auto p-</pre>
0 pb-5">
       <section id="slider-wrapper" class="overflow-hidden position-relative d-</pre>
flex justify-content-center align-items-center">
           <div id="hero" class="position-absolute w-100 d-flex flex-column justify-</pre>
content-center align-items-center">
               <h1 class="d-inline">Quality Above Everything</h1>
               1">We provide the best office supplies for you. Find everything you need at one place.</
                <a href="#visit-shop" class="button p-2 text-white">Learn more</a>
           </div>
           <div id="slider" class="w-100 position-relative d-flex align-items-center">
                <?=getSliderImages()?>
           </div>
       </section>
       <section id="visit-shop" class="p-4 mt-5 pt-5 text-center">
           <span class="small color-primary">Everything you need</span>
           <h2 class="font-weight-light h3">Online Shop</h2>
           <div class="row mx-0 mt-5 align-items-center">
                <div class="col-12 col-md-6 text-right">
                   <img src="assets/img/visit-shop.png" class="w-50" alt="office-</pre>
supplies"/>
               </div>
               <div class="col-12 col-md-6">
                   <span class="fas fa-shopping-</pre>
basket"></span> Check out all our products here!<br/> <a href="shop.php" class="btn btn-
primary mt-2">Visit shop</a>
               </div>
           </div>
       </section>
       <section id="visit-poll" class="p-4 mt-5 text-center">
           <span class="small color-primary">Help us improve</span>
```

```
<h2 class="font-weight-light h3">Take a Poll</h2>
           <div class="row mx-0 mt-5 align-items-center">
               <div class="col-12 col-md-6 text-right">
                   <img src="assets/img/visit-poll.png" class="w-50" alt="poll"/>
               </div>
               <div class="col-12 col-md-6">
                   <?php
                       $fake_poll_button = "";
                       if(!$userObj){
                          $fake_poll_button = "fake-poll-button";
                       }
                   ?>
                   <span class="fas fa-</pre>
poll"></span>
                   What is your favorite writing implement?<br/> <a href="poll.php" cla
ss="btn btn-primary mt-2 <?=$fake poll button?>">Answer</a>
               </div>
           </div>
       </section>
   </main>
<?php
   require_once("views/footer.php");
?>
```

#### 3.1.2 shop.php

```
<?php
    require once("config/connection.php");
   require once("models/session.php");
   require once("models/functions.php");
    require_once("views/head.php");
    require_once("views/nav.php");
    <main id="shop" class="container-fluid position-relative bg-light-trans mx-auto p-
0">
        <section id="shop-image" class="page-image w-100 d-flex flex-column justify-</pre>
content-center align-items-center">
            <h1 class="d-inline">Shop</h1>
            <h2 class="d-inline mt-1 h5">Find everything you need right here!</h2>
        </section>
        <?php
            if(isset($ GET["error"])){
                echo "<p class='alert alert-danger mt-4 container mx-auto mb-
0'>".$ GET["error"]."";";
```

```
}
        ?>
        <section id="products-wrapper" class="row mx-auto mt-5 py-4">
            <div id="products-filters" class="col-12 col-sm-5 col-md-4 col-lg-4 col-xl-</pre>
2 m-0">
                <div class="form-group">
                    <label for="max-price" class="font-weight-</pre>
light h5">Max. price ($):</label>
                    <input type="text" id="max-price" class="form-</pre>
control" placeholder="For example: 15"/>
                </div>
                <div>
                    <a href="#!" id="clear-filters"><span class="fas fa-</pre>
times"></span> Clear all filters</a>&nbsp;
                </div>
                <div class="my-5">
                    <h3 class="h5 font-weight-light">Categories: </h3>
                    ul id="categories">
                    </div>
                <div class="my-5">
                    <h3 class="h5 font-weight-light">Brands: </h3>
                    ul id="brands">
                    </div>
                <div class="my-5">
                    <h3 class="h5 font-weight-light">Colors: </h3>
                    </div>
            </div>
            <div id="products-panel" class="col-12 col-sm-7 col-md-8 col-lg-8 col-xl-</pre>
10 m-0">
                <div id="products-grid-options" class="row justify-content-between">
                    <div class="col-12 col-sm-12 col-xl-5 my-2 m-md-none">
                        <span><span class="fas fa-</pre>
search"></span> Search products:</span>
                        <div class="row m-0">
                            <input type="text" class="form-control col-</pre>
10" value="" id="search-products" placeholder="Enter keywords here"/>
                            <a href="#!" id="search-products-btn" class="col-2 btn btn-
primary"><span class="fas fa-search"></span></a>
                        </div>
                    </div>
                    <div class="col-12 col-sm-6 col-xl-4 my-2 m-md-none">
                        <span><span class="fas fa-sort"></span> Sort by:</span>
                        <select class="form-control" id="sort-products">
```

```
<option value="product_price asc">Price ascending</option>
                            <option value="product_price desc">Price descending</option>
                            <option value="product_title asc">Name ascending</option>
                            <option value="product_title desc">Name descending</option>
                          </select>
                    </div>
                    <div class="col-12 col-sm-6 col-xl-3 my-2 m-md-none">
                        <span><span class="fas fa-layer-</pre>
group"></span> Pagination:</span>
                        <select class="form-control" id="paginate-products">
                            <option value="0">None</option>
                            <option value="12" selected="selected">12 products per page
/option>
                            <option value="24">24 products per page</option>
                          </select>
                    </div>
                </div>
                <div id="products-grid" class="row m-0 mt-4">
                <div id="pagination" class="mt-5 text-center">
                </div>
            </div>
        </section>
    </main>
<?php
    require_once("views/footer.php");
?>
```

#### 3.1.3 product.php

```
if(!isset($_GET["id"])){
    header("Location: index.php");
    die();
}
require_once("config/connection.php");
require_once("models/session.php");
require_once("models/functions.php");
require_once("views/head.php");
require_once("views/hav.php");
}
```

```
<main id="product" class="container position-relative bg-light-trans mx-auto p-5 mb-</pre>
5">
       <a href="shop.php" class="m-2 d-inline-block"><span class="fas fa-chevron-</pre>
left"></span> Back to shop</a>
       <?php
           if($userObj && $userObj->role name == "Administrator"):
       ?>
           <a href="models/delete-
data.php?type=products&id=<?=$_GET["id"]?>" class="btn btn-primary text-right float-
right ml-2"><span class="fas fa-times"></span> Remove</a>
           <a href="admin-product-
edit.php?operation=Edit&id=<?=$_GET["id"]?>" class="btn btn-primary text-right float-
right"><span class="fas fa-tools"></span> Edit</a>
       <?php
           endif;
       <h1 id="product-name" data-product-id=<?=$_GET["id"]?> class="text-muted my-
5 font-weight-light h3 mx-auto">
       </h1>
       <div id="product-wrapper" class="row container-fluid">
           <div class="col12 col-md-6">
               <img src="assets/img/logo.png" alt = "Product Image" id="product-</pre>
image" class="img-fluid" />
           </div>
           <div class="col12 col-md-6 mt-3">
                   <span class="font-weight-bold">Package: </span>
                   <span id="product-package"></span>
               <span class="font-weight-bold">Color: </span>
                   <span id="product-color"></span>
               <div>
                   <?php
                       $fake cart = "-fake";
                       if($userObj){
                           $fake cart = "";
                       }
                   ?>
                   <a href="#!" id="add-to-cart<?=$fake cart?>" data-product-
id=<?=$_GET["id"]?> class="btn btn-primary align-top">Add to cart</a>
                   <input type="number" id="add-to-cart-quantity" class="pl-2 pr-</pre>
0 form-control d-inline-
```

#### 3.1.4 login.php

```
<?php
    require once("config/connection.php");
    require once("models/session.php");
    require_once("models/functions.php");
    require once("views/head.php");
    require_once("views/nav.php");
?>
    <main id="login" class="container position-relative bg-light-trans mx-auto p-4 mb-</pre>
5">
        <h1 class="text-muted my-5 font-weight-light h2 mx-auto">
            Login
        </h1>
        <form id="login-form" class="mx-auto my-</pre>
5" name="loginForm" method="post" action="models/login.php">
            <div class="form-group">
                <label for="username">Username:</label>
                <input type="text" name="username" id="username" data-</pre>
title="username" class="form-control"/>
            </div>
            <div class="form-group">
                <label for="username">Password:</label>
                <input type="password" name="password" id="password" data-</pre>
title="password" class="form-control"/>
            </div>
            <input type="submit" value="Login" name="btn-login" class="btn btn-</pre>
primary"/>
        </form>
        <?php
            if(isset($ GET["error"])){
```

#### 3.1.5 register.php

```
<?php
    require_once("config/connection.php");
    require once("models/session.php");
    require once("models/functions.php");
    require once("views/head.php");
    require_once("views/nav.php");
?>
    <main id="register" class="container position-relative bg-light-trans mx-auto p-</pre>
4 mb-5">
        <?php
            if(isset($_GET["message"])){
                echo "<p class='alert alert-info mt-3 mx-
auto'>".$ GET["message"]."";
        ?>
        <h1 class="text-muted my-5 font-weight-light h2 mx-auto">
            Registration
        </h1>
        <form id="register-form" class="mx-auto my-</pre>
5" name="registerForm" method="post" action="models/registration.php">
            <div class="form-group">
                <label for="full-name">Full Name:</label>
                <input type="text" name="full-name" id="full-name" data-</pre>
title="full name" class="form-control"/>
            </div>
            <div class="form-group">
                <label for="email">E-mail:</label>
                <input type="text" name="email" id="email" data-title="e-</pre>
mail" class="form-control"/>
```

```
</div>
            <div class="form-group">
                <label for="username">Username:</label>
                <input type="text" name="username" id="username" data-</pre>
title="username" class="form-control"/>
            </div>
            <div class="form-group">
                <label for="password">Password:</label>
                <input type="password" name="password" id="password" data-</pre>
title="password" class="form-control"/>
            </div>
            <div class="form-group">
                <label for="password-repeat">Confirm password:</label>
                <input type="password" name="password-repeat" id="password-repeat" data-</pre>
title="password repeat" class="form-control"/>
            <input type="submit" value="Register" name="btn-register" class="btn btn-</pre>
primary"/>
        </form>
        <?php
            if(isset($ GET["error"])){
                echo "<p class='alert alert-danger mt-3 mx-auto register-
error'>".$_GET["error"]."";
        ?>
    </main>
<?php
    require_once("views/footer.php");
?>
```

#### 3.1.6 account.php

```
<?php
    require_once("config/connection.php");
    require_once("models/session.php");

if(!$userObj){
    header("Location: index.php");
    die();
}

require_once("models/functions.php");
    require_once("views/head.php");</pre>
```

```
require_once("views/nav.php");
?>
    <main id="account" class="container position-relative bg-light-trans py-3 mb-5">
        <h1 class="text-muted my-5 font-weight-light h3 px-4">Your Account</h1>
        <section id="account-panel" class="row p-4 h6 font-weight-light">
            <div id="account-info" class="col-12 col-md-6">
                <h2 class="text-muted my-3 font-weight-light h4">Info</h2>
                <div class="my-2">
                     <span class="fas fa-user color-primary"></span> <?=$userObj-</pre>
>username?>
                </div>
                <div class="my-2">
                     <span class="fas fa-signature color-primary"></span> <?=$user0bj-</pre>
>full name?>
                </div>
                <div class="my-2">
                     <span class="fas fa-envelope color-primary"></span> <?=$userObj-</pre>
>email?>
                </div>
                <div class="my-2">
                     <span class="fas fa-calendar-alt color-</pre>
primary"></span> Date created: <?=$userObj->date created?>
                </div>
                <div class="my-2">
                    <span class="fas fa-laptop-house color-</pre>
primary"></span> Role: <?=$userObj->role name?>
                </div>
            </div>
            <div id="change-pw-wrapper" class="col-12 col-md-6">
                <h2 class="text-muted my-3 font-weight-light h4">Change password</h2>
                 <form name="change-pw" id="change-pw" action="models/user-change-</pre>
pw.php" method="post">
                     <input type="password" name="old-pw" id="old-pw" class="form-</pre>
control my-2" placeholder="Old password" data-title="old password"/>
                     <input type="password" name="new-pw" id="new-pw" class="form-</pre>
control my-2" placeholder="New password" data-title="new password"/>
                     <input type="password" name="confirm-pw" id="confirm-</pre>
pw" class="form-control my-2" placeholder="Confirm new password" data-
title="password confirmation"/>
                     <button type="submit" id="btn-change-pw" name="btn-change-
pw" class="btn btn-primary">Change</button>
                </form>
                <?php
                     if(isset($ GET["error"])){
                         echo "<p class='alert alert-danger mt-
3'>".$ GET["error"]."";
```

```
}
    if(isset($_GET["message"])){
        echo "".$_GET["message"]."";
    }
    </div>
    </section>
    </main>
</php
    require_once("views/footer.php");
}>
```

#### 3.1.7 cart.php

```
<?php
    require_once("config/connection.php");
   require_once("models/session.php");
    if(!$userObj){
        header("Location: index.php");
       die();
    }
   require once("models/functions.php");
    require_once("views/head.php");
    require_once("views/nav.php");
?>
    <main id="cart" class="container position-relative bg-light-trans py-3 mb-5">
        <h1 class="text-muted my-5 font-weight-light h3 px-4">Your Cart</h1>
        <div id="cart-items">
        </div>
    </main>
<?php
    require_once("views/footer.php");
```

#### 3.1.8 contact.php

```
<?php
    require_once("config/connection.php");
    require_once("models/session.php");</pre>
```

```
require_once("models/functions.php");
    require once("views/head.php");
    require_once("views/nav.php");
    $name = "";
    $email = "";
    if($userObj){
        $name = $userObj->full name;
        $email = $userObj->email;
?>
    <main id="contact" class="container position-relative bg-light-trans mx-auto p-4 mb-</pre>
5">
        <h1 class="text-muted my-5 font-weight-light h2 mx-auto">
            Send Us a Message
        <form id="contact-form" class="mx-auto my-5" name="contact-</pre>
form" method="post" action="models/send-message.php">
            <div class="form-group">
                <label for="name">Your name:</label>
                <input type="text" name="name" id="name" data-title="name" class="form-</pre>
control" value="<?=$name?>"/>
            </div>
            <div class="form-group">
                <label for="username">E-mail:</label>
                <input type="text" name="email" id="email" data-title="e-</pre>
mail" class="form-control" value="<?=$email?>"/>
            </div>
            <div class="form-group">
                <label for="username">Your message:</label>
                <textarea class="form-control" id="message" name="message" data-</pre>
title="message"></textarea>
            </div>
            <input type="submit" value="Send" name="btn-send" id="btn-</pre>
send" class="btn btn-primary"/>
        </form>
        <?php
            if(isset($ GET["error"])){
                echo "<p class='alert alert-danger mt-3 mx-
auto'>".$ GET["error"]."";";
            if(isset($ GET["message"])){
                echo "<p class='alert alert-info mt-3 mx-
auto'>".$_GET["message"]."";
        ?>
```

```
</main>
<?php
    require_once("views/footer.php");
?>
```

#### 3.1.9 author.php

```
<?php
    require once("config/connection.php");
    require once("models/session.php");
    require once("models/functions.php");
    require_once("views/head.php");
    require_once("views/nav.php");
?>
    <main id="author" class="container position-relative bg-light-trans mx-auto p-4 mb-</pre>
5">
        <span class="small color-primary text-center w-100 d-</pre>
block">Learn more about the developer
        <h1 class="text-muted mb-5 font-weight-light h3 px-4 text-
center">About Author</h1>
        <section id="author-data" class="row container mx-auto justify-content-</pre>
center align-items-center">
            <div id="author-portrait" class="col-10 col-md-4 p-5 p-md-2 p-lg-5">
                <img src="assets/img/author-portrait.jpg" class="img-</pre>
fluid" alt="Author"/>
            </div>
            <div id="author-info" class="col-12 col-md-8 p-5">
                <h4 class="font-weight-light h4">Mihailo Ilić<small class="text-</pre>
muted font-weight-light"> 41/19</small></h4>
                Hi. I'm a web developer from Serbia. I've recently started studying I
T/Web programming at <a href="https://ict.edu.rs/" class="primary-
color" target="_blank"><span class="fa fa-graduation-
cap"></span> ICT College</a> because I've always been interested in computers and techno
logy.
                Although my skills are limited at this moment, I will continuously tr
y to improve them through my studies, projects etc. You can check my recent projects and
learn more about me by visiting my portfolio website.
                <a href="https://mihailoilic.github.io/portfolio/" target="_blank" class
="btn btn-primary text-center">My portfolio website</a>
            </div>
        </section>
    </main>
<?php
    require_once("views/footer.php");
?>
```

#### 3.1.10 poll.php

```
<?php
    require_once("config/connection.php");
   require_once("models/session.php");
    if(!$userObj){
       header("Location: index.php");
       die();
    }
    require once("models/functions.php");
    require_once("views/head.php");
    require_once("views/nav.php");
    <main id="poll" class="container position-relative bg-light-trans py-3 mb-5">
        <h1 class="text-muted my-5 mx-auto font-weight-light h3 px-4">Poll</h1>
        <?php
       if(isset($_GET["error"])){
               echo "<p class='alert alert-danger mt-3 mx-
auto'>".$_GET["error"]."";
       if(isset($_GET["message"])){
            echo "".$_GET["message"]."";";
        ?>
        <section id="poll" class="p-4 h6 font-weight-light mx-auto">
            <h2 class="font-weight-
light h5">What is your favorite writing implement?</h2>
            <?php
               if(!checkParticipation($userObj->user id)):
                   $choices = selectQuery("poll_choices");
                   echo '<form name="poll" action="models/poll-</pre>
vote.php" method="post">';
                   foreach($choices as $choice):
            ?>
               <div class="form-check my-1">
                   <input class="form-check-input" type="radio" name="poll-</pre>
choice" id="poll-choice-<?=$choice->choice_id?>" value="<?=$choice->choice_id?>">
                   <label class="form-check-label" for="poll-choice-<?=$choice-</pre>
>choice id?>">
```

```
<?=$choice->choice_title?>
                   </label>
               </div>
           <?php
                   endforeach;
                   echo '<input type="submit" value="Vote" class="btn btn-primary mt-
2" name="btn-vote" id="btn-vote"/></form>';
               else:
           ?>
               <span class="fas fa-check color-</pre>
primary"></span> You have already voted.
           <?php
               endif;
           ?>
       </section>
   </main>
<?php
   require_once("views/footer.php");
?>
```

#### 3.1.11 admin-products.php

```
<?php
   require once("config/connection.php");
   require once("models/session.php");
   if(!($userObj && $userObj->role_name == "Administrator")){
        header("Location: index.php");
        die();
   require_once("models/functions.php");
   require_once("views/head.php");
   require_once("views/nav.php");
   $categories = selectQuery("categories");
   $brands = selectQuery("brands");
   $colors = selectQuery("colors");
    <main id="admin-products" class="container position-relative bg-light-trans mx-</pre>
auto p-5 mb-5">
        <h1 class="text-muted my-5 font-weight-light h3 mx-auto">
            Product Management
        </h1>
```

```
auto">You can edit or remove products by visiting their page in the <a href="shop.php">s
hop</a>.
        <div class="row container-fluid mt-5">
            <div class="col-12 col-md-6 p-0 p-md-2">
                <div class="row m-0">
                    <h2 class="h5 font-weight-light col-12">Add new category</h2>
                    <input type="text" id="new-category" class="col-8 col-sm-9 col-lg-</pre>
10 form-control d-inline max-width-400" />
                    <button type="button" id="new-category-btn" data-</pre>
type="categories" class="btn btn-primary align-baseline col-4 col-sm-3 col-lg-
2"><span class="fas fa-plus"></span></button>
                </div>
            </div>
            <div class="col-12 col-md-6 p-0 row m-0 mt-2 mt-md-0">
                <h2 class="h5 font-weight-light col-12">Remove category</h2>
                <select name="categories" id="categories" class="form-control col-8 col-</pre>
sm-9 col-lg-10"></select>
                <button type="button" id="remove-category-btn" data-</pre>
type="categories" class="btn btn-primary align-baseline col-4 col-sm-3 col-lg-2 py-
0"><span class="fas fa-trash-alt"></span></button>
            </div>
        </div>
        <div class="row container-fluid mt-5">
            <div class="col-12 col-md-6 p-0 p-md-2">
                <div class="row m-0">
                    <h2 class="h5 font-weight-light col-12">Add new brand</h2>
                    <input type="text" id="new-brand" class="col-8 col-sm-9 col-lg-</pre>
10 form-control d-inline max-width-400" />
                    <button type="button" id="new-brand-btn" data-</pre>
type="brands" class="btn btn-primary align-baseline col-4 col-sm-3 col-lg-
2"><span class="fas fa-plus"></span></button>
                </div>
            </div>
            <div class="col-12 col-md-6 p-0 row m-0 mt-2 mt-md-0">
                <h2 class="h5 font-weight-light col-12">Remove brand</h2>
                <select name="brands" id="brands" class="form-control col-8 col-sm-</pre>
9 col-lg-10"></select>
                <button type="button" id="remove-brand-btn" data-</pre>
type="brands" class="btn btn-primary align-baseline col-4 col-sm-3 col-lg-2 py-
0"><span class="fas fa-trash-alt"></span></button>
            </div>
        </div>
        <div class="row container-fluid mt-5">
            <div class="col-12 col-md-6 p-0 p-md-2">
                <div class="row m-0">
```

```
<h2 class="h5 font-weight-light col-12">Add new color</h2>
                    <input type="text" id="new-color" class="col-8 col-sm-9 col-lg-</pre>
10 form-control d-inline max-width-400" />
                    <button type="button" id="new-color-btn" data-</pre>
type="colors" class="btn btn-primary align-baseline col-4 col-sm-3 col-lg-
2"><span class="fas fa-plus"></span></button>
                </div>
            </div>
            <div class="col-12 col-md-6 p-0 row m-0 mt-2 mt-md-0">
                <h2 class="h5 font-weight-light col-12">Remove color</h2>
                <select name="colors" id="colors" class="form-control col-8 col-sm-</pre>
9 col-lg-10"></select>
                <button type="button" id="remove-color-btn" data-</pre>
type="colors" class="btn btn-primary align-baseline col-4 col-sm-3 col-lg-2 py-
0"><span class="fas fa-trash-alt"></span></button>
            </div>
    </div>
    <h2 class="h5 mt-5 p-4 font-weight-light">Add new product</h2>
    <a href="admin-product-edit.php?operation=New" class="ml-4 btn btn-
primary">Click here to add</a>
    </main>
<?php
    require_once("views/footer.php");
```

#### 3.1.12 admin-product-edit.php

```
    require_once("config/connection.php");
    require_once("models/session.php");
    if(!($userObj && $userObj->role_name == "Administrator")){
        header("Location: index.php");
        die();
    }
    require_once("models/functions.php");
    require_once("views/head.php");
    require_once("views/nav.php");

    if(isset($_GET["operation"])){
        $operation = $_GET["operation"];
    }
    else {
        header("Location: index.php");
    }
}
```

```
die();
    $categories = selectQuery("categories");
    $brands = selectQuery("brands");
    $colors = selectQuery("colors");
    if($operation == "Edit"){
        $id = $ GET["id"];
        $product = selectQuery("products WHERE product_id = $id")[0];
    <main id="admin-product-edit" class="container position-relative bg-light-trans mx-</pre>
auto p-5 mb-5">
        <?php
            if(isset($ GET["success"])){
                echo '<p class="alert alert-info mt-3 mx-
auto">Product successfully added. You can view it <a href="product.php?id='.$_GET["succe
ss"].'">here</a>.';
            if(isset($_GET["error"])){
                echo '<p class="alert alert-danger mt-3 mx-
auto">'.$_GET["error"].'';';
            }
            if($operation == "Edit"):
        ?>
            <a href="product.php?id=<?=$product->product_id?>"><span class="fas fa-</pre>
chevron-left"></span> Back to product</a>
        <?php
            endif;
        <h1 class="text-muted my-5 font-weight-light h3 mx-auto">
            <?=$operation?> Product
        </h1>
        <form method="POST" action="models/insert-data.php" enctype="multipart/form-</pre>
data">
            <input type="hidden" id="product-</pre>
operation" name="operation" value="<?=$operation?>"/>
            <input type="hidden" name="type" value="products"/>
            <?php
                if($operation == "Edit"):
            ?>
                <input type="hidden" name="id" value="<?=$id?>" />
            <?php
                endif;
            ?>
```

```
<div class="form-group">
                <label for="product-title" class="font-weight-</pre>
light">Product title</label>
                <input type="text" data-title="title" class="form-control" id="product-</pre>
title" name="product-title" value="<?=$operation == "Edit" ? $product-
>product title : ""?>"/>
            </div>
            <div class="form-group mt-3">
                <label for="product-description" class="font-weight-</pre>
light">Product description</label>
                <textarea type="text" data-title="description" class="form-</pre>
control" id="product-description" name="product-
description"><?=$operation == "Edit" ? $product->product_description : ""?></textarea>
            </div>
            <div class="form-group">
                <label for="product-image" class="font-weight-</pre>
light">Product image</label><br/>>
                <input type="file" class="" id="product-image" name="product-image" />
            </div>
            <?php
                echo '<div class="form-group mt-2">
                <h3 class="font-weight-light h6">Product category</h3>
                <select name="category" class="form-control">';
                foreach($categories as $cat){
                    $selected = "";
                    if($operation == "Edit" && $cat->category_id == $product-
>category_id){
                        $selected = "selected = 'selected'";
                    echo "<option value='$cat->category_id' $selected>$cat-
>category_name</option>";
                echo '</select></div>';
                echo '<div class="form-group mt-3">
                <h3 class="font-weight-light h6">Product brand</h3>
                <select name="brand" class="form-control">';
                foreach($brands as $brand){
                    $selected = "";
                    if($operation == "Edit" && $brand->brand_id == $product->brand_id){
                        $selected = "selected = 'selected'";
                    echo "<option value='$brand->brand id' $selected>$brand-
>brand name
';
                echo '</select>';
```

```
echo '<div class="form-group mt-3">
                <h3 class="font-weight-light h6">Product color</h3>
                <select name="color" class="form-control">';
                foreach($colors as $color){
                    $selected = "";
                    if($operation == "Edit" && $color->color id == $product->color id){
                         $selected = "selected = 'selected'";
                    echo "<option value='$color->color id' $selected>$color-
>color_name</option>";
                echo '</select>';
            ?>
            <div class="form-group mt-3">
                <label for="product-package" class="font-weight-</pre>
light">Product package size</label>
                <input type="text" data-title="package size" class="form-</pre>
control" id="product-package" name="product-
package" value="<?=$operation == "Edit" ? $product->package_size : ""?>"/>
            </div>
            <div class="form-group">
                <label for="product-price" class="font-weight-</pre>
light">Product Price</label>
                <input type="text" data-title="price" class="form-control" id="product-</pre>
price" name="product-
price" placeholder="For example: 19.99" value="<?=$operation == "Edit" ? $product-</pre>
>product price : ""?>"/>
            </div>
            <button type="sumbit" class="btn btn-primary" id="btn-submit" name="btn-</pre>
submit">Submit</button>
        </form>
    </main>
<?php
    require_once("views/footer.php");
```

#### 3.1.13 admin-users.php

```
<?php
    require_once("config/connection.php");
    require_once("models/session.php");
    if(!($userObj && $userObj->role_name == "Administrator")){
        header("Location: index.php");
```

```
die();
    require once("models/functions.php");
    require_once("views/head.php");
    require_once("views/nav.php");
?>
    <main id="admin-users" class="container-lg position-relative bg-light-trans mx-</pre>
auto p-5 mb-5">
        <h1 class="text-muted my-5 pb-4 font-weight-light h3 mx-auto">
            User Management
        </h1>
        <span class="fas fa-search text-muted"></span>
        <input type="text" id="search-users" class="form-control d-</pre>
inline" placeholder="Search by username or e-mail" />
        <div id="users-wrapper" class="containter-fluid pt-5">
            <div class="user-info row m-0 border-bottom">
                <div class="col-1 user-id h5 font-weight-light">ID</div>
                <div class="col-2 username h5 font-weight-light">Username</div>
                <div class="col-3 user-email h5 font-weight-light">E-mail</div>
                <div class="col-2 user-full-name h5 font-weight-light">Full Name</div>
                <div class="col-2 user-date-created h5 font-weight-</pre>
light">Date created</div>
                <div class="col-2 h5 font-weight-light text-right pr-4">Options</div>
            </div>
            <div id="users">
            </div>
        </div>
    </main>
<?php
    require_once("views/footer.php");
```

#### 3.1.14 admin-messages.php

```
<?php
    require_once("config/connection.php");
    require_once("models/session.php");
    if(!($userObj && $userObj->role_name == "Administrator")){
        header("Location: index.php");
        die();
    }
    require_once("models/functions.php");
```

```
require_once("views/head.php");
    require_once("views/nav.php");
    $messages = selectQuery("messages");
?>
    <main id="admin-messages" class="container-lg position-relative bg-light-trans mx-</pre>
auto p-5 mb-5">
        <h1 class="text-muted my-5 pb-4 font-weight-light h3 mx-auto">
            Message Management
        </h1>
        <?php
                    if(isset($ GET["error"])){
                        echo "<p class='alert alert-danger mt-3 mx-
auto'>".$_GET["error"]."";";
                    if(isset($_GET["message"])){
                    echo "<p class='alert alert-info mt-3 mx-
auto'>".$_GET["message"]."";
                ?>
        <div id="messages-wrapper" class="containter-fluid pt-5 mx-auto">
        <?php
            if(Count($messages) > 0):
                foreach($messages as $message):
        ?>
            <div class="message py-2 border-bottom">
                <div class="message-id h5 font-weight-light">#<?=$message-</pre>
>message_id?></div>
                <div class="sender-name my-1"><span class="fas fa-signature color-</pre>
primary"></span> <?=$message->sender_name?></div>
                <div class="sender-email my-1"><span class="fas fa-envelope color-</pre>
primary"></span> <?=$message->sender email?></div>
                <div class="message-date my-1"><span class="fas fa-calendar-alt color-</pre>
primary"></span> <?=$message->date sent?></div>
                <div class="message-text my-2"><?=$message->message_text?></div>
                <a href="models/delete-message.php?id=<?=$message-</pre>
>message id?>" class="btn btn-primary my-2">Delete</a>
            </div>
        <?php
                endforeach;
            else:
        ?>
            The inbox is empty.
        <?php
            endif;
        ?>
```

### 3.1.15 admin-poll.php

```
<?php
    require once("config/connection.php");
    require once("models/session.php");
    if(!($userObj && $userObj->role name == "Administrator")){
        header("Location: index.php");
        die();
    require once("models/functions.php");
    require once("views/head.php");
    require once("views/nav.php");
    $poll_answers = selectQuery("SELECT choice_title, COUNT(pa.choice_id) AS vote_count
FROM poll answers pa RIGHT OUTER JOIN poll choices pc ON pa.choice id = pc.choice id GRO
UP BY choice title", true);
?>
    <main id="admin-poll" class="container-lg position-relative bg-light-trans mx-</pre>
auto p-5 mb-5">
        <h1 class="text-muted my-5 pb-4 font-weight-light h3 mx-auto">
            Poll Management
        </h1>
        <div id="poll-results" class="containter-fluid pt-5 mx-auto">
            <?php
                if(Count($poll answers) > 0):
                    echo '<h2 class="font-weight-
light h5">What is your favorite writing implement?</h2>';
                    foreach($poll answers as $answer):
            ?>
                <div class="choice py-3 border-bottom font-weight-light h6">
                    <div class="my-2"><span class="fas fa-poll color-</pre>
primary"></span> <?=$answer->choice_title?></div>
                    <div class="my-2">Votes: <?=$answer->vote count?></div>
                </div>
            <?php
                    endforeach;
```

## 3.1.16 config/connection.php

#### 3.1.17 models/admin-change-pw.php

```
$id = $ POST["id"];
        try {
            $rez = changePassword($id, $new_pw);
            if($rez){
                echo json_encode(["message" => "Password successfully changed."]);
                http_response_code(200);
            else {
                echo json_encode(["message" => "Error changing password."]);
                http_response_code(500);
            }
        }
        catch(PDOException $ex){
            echo json_encode(["message" => $ex->getMessage()]);
            http_response_code(500);
        }
    }
   else {
        echo json_encode(["message" => "Not found."]);
        http_response_code(404);
}
```

#### 3.1.18 models/cart-operations.php

```
$cartItemExists = selectQuery("cart WHERE user_id = $userObj-
>user id AND product id = $id");
                try{
                    if($cartItemExists){
                        $qtyString = "quantity + ";
                        if($operation == "set"){
                            $qtyString = "";
                        $updateQuery = $konekcija-
>prepare("UPDATE cart SET quantity = $qtyString :qty WHERE user_id = :userid AND product
 id = :pid");
                        $updateQuery->bindParam(":qty", $quantity);
                        $updateQuery->bindParam(":userid", $userObj->user_id);
                        $updateQuery->bindParam(":pid", $id);
                        $rez = $updateQuery->execute();
                    }
                    else {
                        $insertQuery = $konekcija-
>prepare("INSERT INTO cart VALUES(:pid, :userid, :qty)");
                        $insertQuery->bindParam(":pid", $id);
                        $insertQuery->bindParam(":userid", $userObj->user id);
                        $insertQuery->bindParam(":qty", $quantity);
                        $rez = $insertQuery->execute();
                    }
                    if($rez){
                        echo json_encode(["message" => "Successfully added to your cart.
']);
                        http_response_code(200);
                    }
                    else{
                        echo json_encode(["message" => "An error occurred. Please try ag
ain later."]);
                        http_response_code(500);
                    }
                }
                catch(PDOException $ex){
                    echo json_encode(["message" => "An error occurred. Please try again
later.", "errorMessage" => $ex.getMessage()]);
                    http_response_code(500);
            }
            else if($operation == "remove" || $operation == "remove-all"){
```

```
if($operation == "remove"){
                    $id = addslashes($ GET["id"]);
                    $removeIdString = "product_id = $id AND";
                }
                else {
                    $removeIdString = "";
                try{
                    $deleteQuery = $konekcija-
>prepare("DELETE FROM cart WHERE $removeIdString user_id = :userid");
                    $deleteQuery->bindParam(":userid", $userObj->user id);
                    $rez = $deleteQuery->execute();
                    if($rez){
                        echo json_encode(["message" => "Successfully removed."]);
                        http response code(200);
                    }
                    else{
                        echo json_encode(["message" => "An error occurred. Please try ag
ain later."]);
                        http response code(500);
                    }
                }
                catch(PDOException $ex){
                    echo json_encode(["message" => "An error occurred. Please try again
later.", "errorMessage" => $ex.getMessage()]);
                    http_response_code(500);
                }
            }
        else if($operation == "get"){
            try{
                $cartItems = selectQuery("cart WHERE user_id = $userObj->user_id");
                echo json encode($cartItems);
                http_response_code(200);
            catch(PDOException $ex){
                echo json_encode(["message" => "An error occurred. Please try again late
r.", "errorMessage" => $ex.getMessage()]);
                http response code(500);
            }
        }
        else {
            echo json_encode(["message" => "Not found."]);
            http response code(404);
```

```
}
}
else {
   header("Location: ../index.php");
}
```

#### 3.1.18 models/delete-data.php

```
<?php
   header("Content-type: application/json");
   require_once("../config/connection.php");
   require_once("session.php");
   if(!($userObj && $userObj->role_name == "Administrator")){
        header("Location: ../index.php");
       die();
   if(isset($_GET["type"])){
       $type = $_GET["type"];
       $id = $ GET["id"];
       if($type == "categories" || $type == "brands" || $type == "colors"){
            $column_name = $_GET["column-name"];
            if(Count(selectQuery("products WHERE $column_name = $id"))>0){
                echo json_encode(["message" => "Can't remove this!"]);
                http_response_code(406);
                die();
            try {
                $deleteQuery = $konekcija-
>prepare("DELETE FROM $type WHERE $column_name = :id");
                $deleteQuery->bindParam(":id", $id);
               $rez = $deleteQuery->execute();
                if($rez){
                    echo json_encode(["message" => "Item successfully removed from $type
"]);
                   http_response_code(200);
```

```
}
                else {
                    echo json_encode(["message" => "Error removing item. Try again later
"]);
                    http_response_code(500);
            catch(PDOException $ex){
                echo json_encode(["message" => "Error removing item. ".$ex-
>getMessage()]);
                http response code(500);
        }
        else if($type == "products"){
            try {
                $deleteQuery = $konekcija-
>prepare("DELETE p, c FROM products p LEFT JOIN cart c on p.product_id = c.product_id WH
ERE p.product id = :id");
                $deleteQuery->bindParam(":id", $id);
                $rez = $deleteQuery->execute();
                if($rez){
                    header("Location: ../shop.php");
                }
                else {
                    $error = "Error removing product. Try again later.";
                    header("Location: ../shop.php?error=$error");
                }
            catch(PDOException $ex){
                $error = "Error removing product. Try again later.";
                header("Location: ../shop.php?error=$error");
        }
        else if($type == "users"){
            try {
                $deleteQuery = $konekcija-
>prepare("DELETE FROM users WHERE user_id = :id AND role_id <> 2");
                $deleteQuery->bindParam(":id", $id);
                $rez = $deleteQuery->execute();
```

```
if($rez){
                   echo json_encode(["message" => "User successfully removed."]);
                   http_response_code(200);
               }
               else {
                   echo json_encode(["message" => "Error removing user. Try again later
"]);
                   http response code(500);
               }
           catch(PDOException $ex){
               echo json_encode(["message" => $ex->getMessage()]);
               http_response_code(500);
       }
       else {
           header("Location: ../index.php");
       }
```

#### 3.1.19 models/delete-message.php

```
$message = "Message deleted successfully.";
    header("Location: ../admin-messages.php?message=$message");
}
else {
    $error = "Error deleting message. Try again later.";
    header("Location: ../admin-messages.php?error=$error");
}

catch(PDOException $ex){
    echo $ex->getMessage();
    $error = "Error deleting message. Try again later.";
    header("Location: ../admin-messages.php?error=$error");
}

else {
    header("Location: ../index.php");
}
```

## 3.1.20 models/functions.php

```
<?php
   //BAZA
   function selectQuery($from, $custom = false){
       global $konekcija;
       if($custom){
           $query = $konekcija->query($from);
       else {
           $query = $konekcija->query("SELECT * FROM $from");
       return $query->fetchAll();
   }
   //NAVIGACIJA
   function getNavigationLinks(){
       $navLinks = selectQuery("navigation");
       $navLinksString = "";
       foreach($navLinks as $link){
           $active = strpos($_SERVER["PHP_SELF"], $link->href) ? "active" : "";
           $navLinksString .= "
           <a class='$active' href='$link->href'>$link->title</a>
           ";
```

```
return $navLinksString;
   function getAdminPanelLinks(){
       $adminPanelLinks = selectQuery("admin panel");
       $adminPanelLinksString = "";
        foreach($adminPanelLinks as $link){
            $adminPanelLinksString .= "<span class='mr-3 d-inline-block'>
            <a class='color-primary' href='$link->href'><span class='fas fa-</pre>
tools'></span> $link->title</a>
        </span>";
        return $adminPanelLinksString;
   //HOME
   function getSliderImages(){
        $sliderImages = selectQuery("slider");
       $sliderHTML = "";
       foreach($sliderImages as $image){
            $sliderHTML .= "<div>
            <img src='assets/img/$image->filename' class='w-100' alt='$image->title'/>
            </div>";
        return $sliderHTML;
   //SHOP
   function getProducts($category, $brand, $color, $search, $max price, $order){
            $where = "";
            if(!empty($category)){
                $queryString = "c.category id IN ($category)";
                if(!empty($where)){
                    $where .= " AND $queryString";
                else {
                    $where .= "WHERE $queryString";
                }
            if(!empty($brand)){
                $queryString = "b.brand_id IN ($brand)";
                if(!empty($where)){
                    $where .= " AND $queryString";
                else {
                    $where .= "WHERE $queryString";
```

```
if(!empty($color)){
               $queryString = "cls.color_id IN ($color)";
               if(!empty($where)){
                   $where .= " AND $queryString";
               else {
                   $where .= "WHERE $queryString";
           if(!empty($search)){
               $queryString = "LOWER(product_title) LIKE '%$search%'";
               if(!empty($where)){
                   $where .= " AND $queryString";
               }
               else {
                   $where .= "WHERE $queryString";
           if(!empty($max_price)){
               $queryString = "product_price < $max_price";</pre>
               if(!empty($where)){
                   $where .= " AND $queryString";
               }
               else {
                   $where .= "WHERE $queryString";
           if(!empty($order)){
               $where .= " ORDER BY $order";
           }
           return selectQuery("products p JOIN categories c ON c.category_id = p.catego
ry_id JOIN brands b ON b.brand_id = p.brand_id JOIN colors cls ON cls.color_id = p.color
id $where");
   function getProductsPage($products, $pagination, $page){
       $productsOnPage = array_slice($products, $pagination * ($page - 1), $pagination)
       return $productsOnPage;
   }
   //USER
   function changePassword($id, $new){
       global $konekcija;
```

#### 3.1.21 models/get-data.php

```
<?php
    header("Content-type: application/json");
    require once("../config/connection.php");
    require once("session.php");
    require_once("functions.php");
    if(isset($_GET["type"])){
        $table = $_GET["type"];
        if($table == "products"){
            $category = isset($_GET["category"]) ? $_GET["category"] : "";
            $brand = isset($_GET["brand"]) ? $_GET["brand"] : "";
            $color = isset($_GET["color"]) ? $_GET["color"] : "";
            $search = isset($_GET["search"]) ? strtolower(addslashes($_GET["search"])) :
 "";
            $max price = isset($ GET["max-price"]) ? $ GET["max-price"] : "";
            $order = isset($_GET["order"]) ? $_GET["order"] : "";
            $pagination = isset($_GET["pagination"]) ? (int)$_GET["pagination"] : "";
            $page = isset($_GET["page"]) ? (int)$_GET["page"] : "";
            try{
                $products = getProducts($category, $brand, $color, $search, $max_price,
$order);
```

```
$noOfPages = 0;
                if($pagination > 0){
                    $noOfPages = Count($products) / (int)$pagination;
                    if(Count($products) % (int)$pagination > 0){
                        $noOfPages += 1;
                    $products = getProductsPage($products, $pagination, $page);
                }
                echo json_encode(["products"=> $products, "pages" => $noOfPages]);
                http_response_code(200);
            catch(PDOException $ex){
                echo json_encode($ex);
                http_response_code(500);
        }
        else if($table == "brands" || $table == "categories" || $table == "colors"){
            try {
                $data = selectQuery($table);
                echo json encode($data);
                http_response_code(200);
            catch(PDOException $ex){
                echo json_encode($ex);
                http_response_code(500);
        }
        else if($table == "users" && $userObj && $userObj-
>role_name == "Administrator"){
            try {
                $users = selectQuery("users WHERE role_id != 2");
                echo json_encode($users);
                http_response_code(200);
            catch(PDOException $ex){
                echo json_encode($ex);
                http_response_code(500);
        }
        else {
            echo json encode(["message" => "Not found"]);
```

```
http_response_code(404);
}

else {
    header("Location: ../index.php");
}
```

## 3.1.22 models/insert-data.php

```
<?php
   header("Content-type: application/json");
   require once("../config/connection.php");
   require_once("session.php");
   if(!($userObj && $userObj->role_name == "Administrator")){
        header("Location: ../index.php");
       die();
   require_once("functions.php");
   if(isset($_POST["type"])){
       $type = $_POST["type"];
       if($type == "categories" || $type == "brands" || $type == "colors"){
            $name = $_POST["name"];
            $column name = $ POST["column-name"];
            if(!preg_match("/\p{Lu}[\p{L}&,\-\d]{1,30}/", name)){
                echo json_encode(["message"=>"Invalid name format."]);
                http_response_code(406);
            }
            try {
                $insertQuery = $konekcija-
>prepare("INSERT INTO $type($column_name) VALUES(:name)");
                $insertQuery->bindParam(":name", $name);
                $rez = $insertQuery->execute();
                if($rez){
                    echo json_encode(["message" => "Successfully added item to $type."])
                    http_response_code(200);
```

```
else {
                    echo json encode(["message" => "Error adding item. Try again later."
]);
                    http_response_code(500);
                }
            catch(PDOException $ex){
                echo json_encode(["message" => "Error adding item. Try again later."]);
                http response code(500);
        }
        else if($type == "products"){
            $operation = $_POST["operation"];
            if($operation == "Edit"){
                $id = $_POST["id"];
                $location_params = "operation=Edit&id=$id";
            else {
                $location params = "operation=New";
            $title = addslashes($_POST["product-title"]);
            if(!preg_match("/^\p{Lu}.{4,99}$/", $title)){
                $error = "Title should be between 5 and 100 characters long start with a
 capital letter.";
                header("Location: ../admin-product-
edit.php?$location_params&error=$error");
                die();
            }
            $desc = addslashes($_POST["product-description"]);
            if(!preg_match("/^\p{Lu}.{19,999}$/", $desc)){
                $error = "Description should be between 20 and 1000 characters long star
t with a capital letter.";
                header("Location: ../admin-product-
edit.php?$location_params&error=$error");
                die();
            $cat_id = $_POST["category"];
            $brand_id = $_POST["brand"];
            $color_id = $_POST["color"];
            $price = addslashes($_POST["product-price"]);
            if(!preg match("/^\d+\.\d+$/", $price)){
```

```
$error = "Price must be in XX.XX format, use only numbers.";
                header("Location: ../admin-product-
edit.php?$location params&error=$error");
                die();
            }
            $package = addslashes($ POST["product-package"]);
            if(!preg_match("/.{2,20}/", $package)){
                $error = "Invalid package size. Must be between 2 and 20 characters.";
                header("Location: ../admin-product-
edit.php?$location params&error=$error");
                die();
            }
            $fileExists = false;
            if(file_exists($_FILES["product-image"]["tmp_name"])){
                $fileExists = true;
                $temp_img_path = $_FILES["product-image"]["tmp_name"];
                $img name = $ FILES["product-image"]["name"];
                $ext = array_slice(explode(".", $img_name), -1)[0];
                if(!in_array($ext, ["jpg", "jpeg", "gif", "webp", "png"])){
                    $error = addslashes("Allowed formats for images are: jpg, jpeg, gif,
 webp, png.");
                    header("Location: ../admin-product-
edit.php?$location_params&error=$error");
                    die();
                }
                $time = (string)microtime(true);
                $name_string = str_replace(".", "", str_replace(" ", "", $time));
                $new_img_name = "$name_string.$ext";
            else if ($operation == "New"){
                $error = "You must provide an image.";
                header("Location: ../admin-product-
edit.php?$location params&error=$error");
                die();
            if($operation == "New"){
                try{
                    $insertQuery = $konekcija-
>prepare("INSERT INTO products(product_title, product_description, category_id, brand_id
, color id, product price, package size, product image) VALUES(:title, :desc, :catid, :b
randid, :colorid, :price, :package, :image)");
                    $insertQuery->bindParam(":title", $title);
                    $insertQuery->bindParam(":desc", $desc);
```

```
$insertQuery->bindParam(":catid", $cat_id);
                    $insertQuery->bindParam(":brandid", $brand_id);
                    $insertQuery->bindParam(":colorid", $color_id);
                    $insertQuery->bindParam(":price", $price);
                    $insertQuery->bindParam(":package", $package);
                    $insertQuery->bindParam(":image", $new_img_name);
                    $rez = $insertQuery->execute();
                    if($rez){
                        $id = $konekcija->lastInsertId();
                        move_uploaded_file($temp_img_path, "../assets/img/$new_img_name"
);
                        header("Location: ../admin-product-
edit.php?$location params&success=".$id);
                    }
                    else {
                        $error = addslashes("Error creating product. Try again later.");
                        header("Location: ../admin-product-
edit.php?$location params&error=$error");
                catch(PDOException $ex){
                    $error = addslashes("Error creating product. Try again later.");
                    header("Location: ../admin-product-
edit.php?$location params&error=$error");
            }
            else if ($operation == "Edit"){
                try{
                    $image string = "";
                    if($fileExists){
                        $image_string = ", product_image = :image";
                    $updateQuery = $konekcija-
>prepare("UPDATE products SET product_title = :title, product_description = :desc, categ
ory id = :catid, brand id = :brandid, color id = :colorid, product price =:price, packag
e size =:package$image string WHERE product id = :id");
                    $updateQuery->bindParam(":title", $title);
                    $updateQuery->bindParam(":desc", $desc);
                    $updateQuery->bindParam(":catid", $cat_id);
                    $updateQuery->bindParam(":brandid", $brand id);
                    $updateQuery->bindParam(":colorid", $color id);
                    $updateQuery->bindParam(":price", $price);
                    $updateQuery->bindParam(":package", $package);
                    if($fileExists){
```

```
$updateQuery->bindParam(":image", $new_img_name);
                    }
                    $updateQuery->bindParam(":id", $id);
                    $rez = $updateQuery->execute();
                    if($rez){
                        move_uploaded_file($temp_img_path, "../assets/img/$new_img_name"
);
                        header("Location: ../product.php?id=$id");
                    }
                    else {
                        $error = addslashes("Error creating product. Try again later.");
                        header("Location: ../admin-product-
edit.php?$location params&error=$error");
                }
                catch(PDOException $ex){
                    var_dump($ex);
                    die();
                    $error = addslashes("Error creating product. Try again later.");
                    header("Location: ../admin-product-
edit.php?$location params&error=$error");
            }
        }
        else {
            echo json_encode(["message" => "Not found."]);
            http_response_code(404);
    }
   else {
        header("Location: ../index.php");
```

## 3.1.23 models/login.php

```
header("Location: ../login.php?error=Invalid%20username.");
           die();
       p = "/^(?=.*p{Lu})(?=.*p{Ll})(?=.*d)(?=.{6,})/";
       if(!preg_match($reg_user, $_POST["password"])){
            header("Location: ../login.php?error=Invalid%20password.");
            die();
       }
       $user = addslashes($_POST["username"]);
       $pw = md5(addslashes($_POST["password"]));
       $loginQuery = $konekcija-
>prepare("SELECT * FROM users u JOIN roles r ON u.role_id = r.role_id WHERE username =
:user AND u.password = :pw");
       $loginQuery->bindParam(":user", $user);
       $loginQuery->bindParam(":pw", $pw);
       $loginQuery->execute();
       $userObj = $loginQuery->fetch();
       if($userObj){
            $ SESSION["user"] = $userObj;
           header("Location: ../index.php");
       else {
            $error = addslashes("Invalid username and/or password.");
           header("Location: ../login.php?error=".$error);
       }
   }
   else {
       header("Location: ../index.php");
```

#### 3.1.24 models/logout.php

```
<?php
    session_start();
    unset($_SESSION["user"]);
    header("Location: ../index.php");
?>
```

```
<?php
   require_once("../config/connection.php");
   require_once("session.php");
   if(!$userObj){
       header("Location: ../index.php");
       die();
   }
   if(isset($_POST["btn-vote"])){
        $choice = $ POST["poll-choice"];
       $id = $userObj->user id;
       try {
            $insertQuery = $konekcija-
>prepare("INSERT INTO poll answers(user id, choice id) VALUES(:id, :choice)");
            $insertQuery->bindParam(":id", $id);
            $insertQuery->bindParam(":choice", $choice);
            $rez = $insertQuery->execute();
            if($rez){
                $message = "Thank you for voting!";
                header("Location: ../poll.php?message=$message");
           else {
                $error = "Error recording your vote. Try again later.";
                header("Location: ../poll.php?error=$error");
            }
        }
       catch(PDOException $ex){
            echo $ex->getMessage();
            $error = "Error recording your vote. Try again later.";
            header("Location: ../poll.php?error=$error");
        }
   }
   else {
       header("Location: ../index.php");
   }
```

```
<?php
          session_start();
         require_once("../config/connection.php");
         if(isset($_POST["btn-register"])){
                   reg user = "/^w{3,30}$/";
                   if(!preg match($reg user, $ POST["username"])){
                             header("Location: ../login.php?error=Invalid%20username.");
                             die();
                   }
                   $reg pw = "/^(?=.*\p\{Lu\})(?=.*\p\{L1\})(?=.*\d)(?=.{6,})/";
                   if(!preg_match($reg_pw, $_POST["password"])){
                             header("Location: ../login.php?error=Invalid%20password.");
                             die();
                   reg_email = "/^[a-z]((\.|-|_)?[a-z0-9]){2,}@[a-z]((\.|-)?[a-z0-9]+){2,}\.[a-z0-9]+){2,}\.[a-z0-9]+){2,}\.[a-z0-9]+){2,}\.[a-z0-9]+){2,}\.[a-z0-9]+){2,}\.[a-z0-9]+){2,}\.[a-z0-9]+){2,}\.[a-z0-9]+){2,}\.[a-z0-9]+){2,}\.[a-z0-9]+){2,}\.[a-z0-9]+){2,}\.[a-z0-9]+){2,}\.[a-z0-9]+){2,}\.[a-z0-9]+){2,}\.[a-z0-9]+){2,}\.[a-z0-9]+){2,}\.[a-z0-9]+){2,}\.[a-z0-9]+){2,}\.[a-z0-9]+){2,}\.[a-z0-9]+){2,}\.[a-z0-9]+){2,}\.[a-z0-9]+){2,}\.[a-z0-9]+){2,}\.[a-z0-9]+){2,}\.[a-z0-9]+){2,}\.[a-z0-9]+]+(-1)*[a-z0-9]+]+(-1)*[a-z0-9]+(-1)*[a-z0-9]+(-1)*[a-z0-9]+(-1)*[a-z0-9]+(-1)*[a-z0-9]+(-1)*[a-z0-9]+(-1)*[a-z0-9]+(-1)*[a-z0-9]+(-1)*[a-z0-9]+(-1)*[a-z0-9]+(-1)*[a-z0-9]+(-1)*[a-z0-9]+(-1)*[a-z0-9]+(-1)*[a-z0-9]+(-1)*[a-z0-9]+(-1)*[a-z0-9]+(-1)*[a-z0-9]+(-1)*[a-z0-9]+(-1)*[a-z0-9]+(-1)*[a-z0-9]+(-1)*[a-z0-9]+(-1)*[a-z0-9]+(-1)*[a-z0-9]+(-1)*[a-z0-9]+(-1)*[a-z0-9]+(-1)*[a-z0-9]+(-1)*[a-z0-9]+(-1)*[a-z0-9]+(-1)*[a-z0-9]+(-1)*[a-z0-9]+(-1)*[a-z0-9]+(-1)*[a-z0-9]+(-1)*[a-z0-9]+(-1)*[a-z0-9]+(-1)*[a-z0-9]+(-1)*[a-z0-9]+(-1)*[a-z0-9]+(-1)*[a-z0-9]+(-1)*[a-z0-9]+(-1)*[a-z0-9]+(-1)*[a-z0-9]+(-1)*[a-z0-9]+(-1)*[a-z0-9]+(-1)*[a-z0-9]+(-1)*[a-z0-9]+(-1)*[a-z0-9]+(-1)*[a-z0-9]+(-1)*[a-z0-9]+(-1)*[a-z0-9]+(-1)*[a-z0-9]+(-1)*[a-z0-9]+(-1)*[a-z0-9]+(-1)*[a-z0-9]+(-1)*[a-z0-9]+(-1)*[a-z0-9]+(-1)*[a-z0-9]+(-1)*[a-z0-9]+(-1)*[a-z0-9]+(-1)*[a-z0-9]+(-1)*[a-z0-9]+(-1)*[a-z0-9]+(-1)*[a-z0-9]+(-1)*[a-z0-9]+(-1)*[a-z0-9]+(-1)*[a-z0-9]+(-1)*[a-z0-9]+(-1)*[a-z0-9]+(-1)*[a-z0-9]+(-1)*[a-z0-9]+(-1)*[a-z0-9]+(-1)*[a-z0-9]+(-1)*[a-z0-9]+(-1)*[a-z0-9]+(-1)*[a-z0-9]+(-1)*[a-z0-9]+(-1)*[a-z0-9]+(-1)*[a-z0-9]+(-1)*[a-z0-9]+(-1)*[a-z0-9]+(-1)*[a-z0-9]+(-1)*[a-z0-9]+(-1)*[a-z0-9]+(-1)*[a-z0-9]+(-1)*[a-z0-9]+(-1)*[a-z0-9]+(-1)*[a-z0-9]+(-1)*[a-z0-9]+(-1)*[a-z0-9]+(-1)*[a-z0-9]+(-1)*[a-z0-9]+(-1)*[a-z0-9]+(-1)*[a-z0-9]+(-1)*[a-z0-9]+(-1)*[a-z0-9]+(-1)*[a-z0-9]+(-1)*[a-z0-9]+(-1)*[a-z0-9]+(-1)*[a-z0-9]+(-1)*[a-z0-9]+(-1)*[a-z0-9]+(-1)*[a-z0-9]+(-1)*[a-z0-9]+(-1)*[a-z0-9]+(-1)*[a-z0-9]+(-1)*[a-z0-9]+(-1)*[a-z0-9]+(-1)*[a-z0-9]+(-1)*[a-z0-9]+(-1)*[a-z0-9]+(-1)*[a-z0-9]+(-1)
z]{2,6}$/i";
                   if(!preg match($reg email, $ POST["email"])){
                             header("Location: ../login.php?error=Invalid%20e-mail.");
                             die();
                   $reg full name = "/^p\{L_1,14\}()sp\{L_1,14\}(1,14\})\{1,3\}$/";
                   if(!preg_match($reg_full_name, $_POST["full-name"])){
                             header("Location: ../login.php?error=Invalid%20full%20name.");
                             die();
                   $user = addslashes($ POST["username"]);
                   $pw = md5(addslashes($_POST["password"]));
                   $email = addslashes($_POST["email"]);
                   $full name = addslashes($ POST["full-name"]);
                   $userQuery = $konekcija-
>prepare("SELECT username, email FROM users WHERE username = :user OR email=:email");
                   $userQuery->bindParam(":user", $user);
                   $userQuery->bindParam(":email", $email);
                   $userQuery->execute();
                   $userObj = $userQuery->fetch();
                   if($userObj){
                             if($userObj->email == $email){
                                       $error = addslashes("This e-
mail address has already been used by another person.");
                             else {
```

```
$error = addslashes("This username has already been taken.");
            header("Location: ../register.php?error=".$error);
        else {
            try {
                $registerQuery = $konekcija-
>prepare("INSERT INTO users(username, password, email, full_name) VALUES(:user, :pw, :em
ail, :fname)");
                $registerQuery->bindParam(":user", $user);
                $registerQuery->bindParam(":email", $email);
                $registerQuery->bindParam(":pw", $pw);
                $registerQuery->bindParam(":fname", $full_name);
                $rez = $registerQuery->execute();
                if($rez){
                    $message = addslashes("Registration successful. You can login now.")
                    header("Location: ../login.php?message=".$message);
                else {
                    $error = addslashes("Database error, registration has failed. Please
 try again later.");
                    header("Location: ../register.php?error=".$error);
                }
            catch(PDOException $ex){
                $error = addslashes("Database error, registration has failed. Please try
 again later.");
                echo $ex->getMessage();
                header("Location: ../register.php?message=".$error);
        }
   else {
        header("Location: ../index.php");
    }
```

```
<?php
          require_once("../config/connection.php");
          if(isset($_POST["btn-send"])){
                    reg_email = "/^[a-z]((\.|-|_)?[a-z0-9]){2,}@[a-z]((\.|-)?[a-z0-9]+){2,}\.[a-z0-9]+){2,}\.[a-z0-9]+){2,}\.[a-z0-9]+){2,}\.[a-z0-9]+){2,}\.[a-z0-9]+){2,}\.[a-z0-9]+){2,}\.[a-z0-9]+){2,}\.[a-z0-9]+){2,}\.[a-z0-9]+){2,}\.[a-z0-9]+){2,}\.[a-z0-9]+){2,}\.[a-z0-9]+){2,}\.[a-z0-9]+){2,}\.[a-z0-9]+){2,}\.[a-z0-9]+){2,}\.[a-z0-9]+){2,}\.[a-z0-9]+){2,}\.[a-z0-9]+){2,}\.[a-z0-9]+){2,}\.[a-z0-9]+){2,}\.[a-z0-9]+){2,}\.[a-z0-9]+){2,}\.[a-z0-9]+){2,}\.[a-z0-9]+){2,}\.[a-z0-9]+){2,}\.[a-z0-9]+]+(-1)*[a-z0-9]+]+(-1)*[a-z0-9]+(-1)*[a-z0-9]+(-1)*[a-z0-9]+(-1)*[a-z0-9]+(-1)*[a-z0-9]+(-1)*[a-z0-9]+(-1)*[a-z0-9]+(-1)*[a-z0-9]+(-1)*[a-z0-9]+(-1)*[a-z0-9]+(-1)*[a-z0-9]+(-1)*[a-z0-9]+(-1)*[a-z0-9]+(-1)*[a-z0-9]+(-1)*[a-z0-9]+(-1)*[a-z0-9]+(-1)*[a-z0-9]+(-1)*[a-z0-9]+(-1)*[a-z0-9]+(-1)*[a-z0-9]+(-1)*[a-z0-9]+(-1)*[a-z0-9]+(-1)*[a-z0-9]+(-1)*[a-z0-9]+(-1)*[a-z0-9]+(-1)*[a-z0-9]+(-1)*[a-z0-9]+(-1)*[a-z0-9]+(-1)*[a-z0-9]+(-1)*[a-z0-9]+(-1)*[a-z0-9]+(-1)*[a-z0-9]+(-1)*[a-z0-9]+(-1)*[a-z0-9]+(-1)*[a-z0-9]+(-1)*[a-z0-9]+(-1)*[a-z0-9]+(-1)*[a-z0-9]+(-1)*[a-z0-9]+(-1)*[a-z0-9]+(-1)*[a-z0-9]+(-1)*[a-z0-9]+(-1)*[a-z0-9]+(-1)*[a-z0-9]+(-1)*[a-z0-9]+(-1)*[a-z0-9]+(-1)*[a-z0-9]+(-1)*[a-z0-9]+(-1)*[a-z0-9]+(-1)*[a-z0-9]+(-1)*[a-z0-9]+(-1)*[a-z0-9]+(-1)*[a-z0-9]+(-1)*[a-z0-9]+(-1)*[a-z0-9]+(-1)*[a-z0-9]+(-1)*[a-z0-9]+(-1)*[a-z0-9]+(-1)*[a-z0-9]+(-1)*[a-z0-9]+(-1)*[a-z0-9]+(-1)*[a-z0-9]+(-1)*[a-z0-9]+(-1)*[a-z0-9]+(-1)*[a-z0-9]+(-1)*[a-z0-9]+(-1)*[a-z0-9]+(-1)*[a-z0-9]+(-1)*[a-z0-9]+(-1)*[a-z0-9]+(-1)*[a-z0-9]+(-1)*[a-z0-9]+(-1)*[a-z0-9]+(-1)*[a-z0-9]+(-1)*[a-z0-9]+(-1)*[a-z0-9]+(-1)*[a-z0-9]+(-1)*[a-z0-9]+(-1)*[a-z0-9]+(-1)*[a-z0-9]+(-1)*[a-z0-9]+(-1)*[a-z0-9]+(-1)*[a-z0-9]+(-1)*[a-z0-9]+(-1)*[a-z0-9]+(-1)*[a-z0-9]+(-1)*[a-z0-9]+(-1)*[a-z0-9]+(-1)*[a-z0-9]+(-1)*[a-z0-9]+(-1)*[a-z0-9]+(-1)*[a-z0-9]+(-1)*[a-z0-9]+(-1)*[a-z0-9]+(-1)*[a-z0-9]+(-1)*[a-z0-9]+(-1)*[a-z0-9]+(-1)*[a-z0-9]+(-1)*[a-z0-9]+(-1)*[a-z0-9]+(-1)*[a-z0-9]+(-1)*[a-z0-9]+(-1)*[a-z0-9]+(-1)*[a-z0-9]+(-1)*[a-z0-9]+(-1)*[a-z0-9]+(-1)*[a-z0-9]+(-1)*[a-z0-9]+(-1)*[a-z0-9]+(-1)*[a-z0-9]+(-1)
z]{2,6}$/i";
                    if(!preg match($reg email, $ POST["email"])){
                              $error = "Invalid e-mail address.";
                              header("Location: ../contact.php?error=$error");
                             die();
                    }
                   p{L}{1,14}(\sp{Lu}){0,3}$/";
                   if(!preg match($reg name, $ POST["name"])){
                              $error = "Invalid name.";
                             header("Location: ../contact.php?error=$error");
                             die();
                   }
                   $reg_message = "/^.{20,1000}$/";
                   if(!preg match($reg message, $ POST["message"])){
                              header("Location: ../contact.php?error=$error");
                             die();
                    }
                   $name = addslashes($ POST["name"]);
                   $email = addslashes($_POST["email"]);
                   $message = addslashes($_POST["message"]);
                   try {
                             $insertQuery = $konekcija-
>prepare("INSERT INTO messages(sender_name, sender_email, message_text) VALUES(:name, :e
mail, :message)");
                             $insertQuery->bindParam(":name", $name);
                             $insertQuery->bindParam(":email", $email);
                             $insertQuery->bindParam(":message", $message);
                              $rez = $insertQuery->execute();
                             if($rez){
                                       $message = addslashes("Message sent successfully.");
                                       header("Location: ../contact.php?message=".$message);
                              else {
                                       $error = addslashes("Error sending message. Please try again later.");
                                       echo $ex->getMessage();
                                       header("Location: ../contact.php?error=".$error);
```

```
}
}
catch(PDOException $ex){
    $error = addslashes("Error sending message. Please try again later.");
    echo $ex->getMessage();
    header("Location: ../contact.php?error=".$error);
}
else {
    header("Location: ../index.php");
}
```

3.1.28 models/session.php

```
<?php
    session_start();
    $userObj = false;
    if(isset($_SESSION["user"])){
        $userObj = $_SESSION["user"];
    }
}</pre>
```

3.1.29 models/user-change-pw.php

```
<?php
   header("Content-type: application/json");
   require_once("../config/connection.php");
   require_once("session.php");
   require_once("functions.php");
   if($userObj && isset($_POST["btn-change-pw"])){
       pw = "/^(?=.*p\{Lu\})(?=.*p\{L1\})(?=.*d)(?=.{6,50})/";
       if(!preg_match($reg_pw, $_POST["new-pw"])){
           $error = "Password too weak, or invalid password format.";
           header("Location: ../account.php?error=$error");
           die();
       }
       $old pw = md5(addslashes($_POST["old-pw"]));
       $new_pw = md5(addslashes($_POST["new-pw"]));
       $confirm_pw = md5(addslashes($_POST["confirm-pw"]));
       $id = $userObj->user_id;
```

```
if($old pw != $userObj->password){
        $error = "Incorrect old password.";
        header("Location: ../account.php?error=$error");
        die();
    }
    if($new pw != $confirm pw){
        $error = "Passwords do not match.";
        header("Location: ../account.php?error=$error");
        die();
    }
    try {
        $rez = changePassword($id, $new pw);
        if($rez){
            $message = "Password successfully changed.";
            header("Location: ../account.php?message=$message");
        else {
            $error = "Error changing password. Try again later.";
            header("Location: ../account.php?error=$error");
        }
    catch(PDOException $ex){
        $error = "Error changing password. Try again later.";
        header("Location: ../account.php?error=$error");
else {
    header("Location: ../index.php");
}
```

#### 3.1.30 views/footer.php

```
<div id="footer-links" class="col-12 col-md-4 text-center mt-5 mt-md-0">
          <h5 id="footer-links-title" class="d-inline font-weight-light">Links</h5>
          <1i>>
                  <a href="documentation.pdf" target="_blank"><span class="far fa-</pre>
file-pdf"></span> Documentation</a>
              <1i>>
                  <a href="assets/js/main.js" target="_blank"><span class="far fa-</pre>
file-code"></span> main.js</a>
              <1i>>
                  <a href="sitemap.xml" target="_blank"><span class="fas fa-</pre>
sitemap"></span> Sitemap</a>
              </div>
       0">Mihailo Ilic 41/19
   </footer>
   <script type="text/javascript" src="assets/js/jquery-3.5.1.min.js"></script>
   <script type="text/javascript" src="assets/slick/slick.min.js"></script>
   <script type="text/javascript" src="assets/js/main.js"></script>
</body>
</html>
```

#### 3.1.31 views/head.php

```
<!DOCTYPE html>
<html lang="en">
<head>
   <meta charset="UTF-8">
   <meta name="viewport" content="width=device-width, initial-scale=1.0">
   <title>officeware - Best Office Supplies At One Place</title>
   <meta name="keywords" content=""/>
   <meta name="author" content="Mihailo Ilic"/>
   <link rel="shortcut icon" href="favicon.ico" type="image/x-icon"/>
   <link rel="stylesheet" type="text/css" href="https://cdnjs.cloudflare.com/ajax/libs/</pre>
font-awesome/5.15.2/css/all.min.css"/>
   <link rel="stylesheet" href="assets/css/bootstrap.min.css"/>
   <link rel="stylesheet" type="text/css" href="assets/slick/slick.css"/>
   <link rel="stylesheet" href="assets/css/style.css"/>
</head>
<body>
```

#### 3.1.32 views/nav.php

```
<?php
   try {
       $navLinksString = getNavigationLinks();
   catch(PDOException $ex){
       echo "Can't load navigation: " + $ex->getMessage();
?>
<header id="header" class="position-fixed w-100 m-0 row align-items-center bg-light-
trans">
       <div class="col-3 col-sm-6 col-md-4 col-lg-3">
           <!-- Logo -->
           <a class="font-weight-bold" href="index.php">
               <img src="assets/img/logo.png" alt="officeware" id="logo-img"/>
               <span id="logo-title" class="d-none d-sm-inline"> officeware</span>
       </div>
       <!-- glavni meni -->
       <nav class="col-6 col-md-5 col-lg-6 d-none d-md-block">
           <?=$navLinksString?>
           </nav>
       <!-- opcije vezane za nalog, responsive meni toggle -->
       <div id="side-togglers" class="col-9 col-sm-6 col-md-3 text-right">
           <?php
               if($userObj):
           ?>
           <a class="position-relative d-inline mx-2 color-primary" href="account.php">
               <span class="fas fa-user-cog"></span>
           <a class="position-relative d-inline mx-2 color-primary" href="cart.php">
               <span class="fas fa-shopping-cart"></span>
           <a class="position-relative d-inline mx-2 color-
primary" href="models/logout.php">
               <span class="fas fa-sign-out-alt"></span>
           </a>
           <?php
```

```
else:
           ?>
           <a class="position-relative d-inline mx-2 color-primary" href="login.php">
               Login
           </a>
           <a class="position-relative d-inline mx-2 color-</pre>
primary" href="register.php">
               Register
           </a>
           <?php
               endif;
           ?>
           <a id="menu-button" class="position-relative d-inline d-md-none ml-3 mr-
2 color-primary" href="#!">
               <span class="fas fa-bars"></span>
           </a>
       </div>
       <!-- admin panel -->
       <?php
           if($userObj && $userObj->role name == "Administrator"):
               $adminPanelLinksString = getAdminPanelLinks();
       ?>
           <div id="admin-panel" class="position-absolute w-100 bg-light-trans row p-</pre>
2 m-0">
               <span class="col-12 col-sm-3 text-muted small">Admin panel
               <div class="col-12 col-sm-9">
                   <?=$adminPanelLinksString?>
               </div>
           </div>
       <?php
           endif;
       ?>
       <!-- responsive meni -->
       <nav id="responsive-menu-wrapper" class="position-absolute w-100 py-3 bg-light-</pre>
trans d-md-none">
           center">
               <?=$navLinksString?>
           </nav>
</header>
```

# 3.2 CSS (SCSS)

#### 3.2.1 assets/css/style.scss

```
$primary: #50A6C2;
$light-transparent: rgba(255,255,255,.9);
    margin: 0px;
    padding: 0px;
@font-face{
    src: url("../fonts/Questrial-Regular.ttf");
    font-family: "Questrial";
html {
    scroll-behavior: smooth;
    ::-webkit-scrollbar {
        width: 10px;
    ::-webkit-scrollbar-thumb {
        background-color: $primary;
        &:hover{
            background: rgba($primary, .8);
    }
body {
    position: relative;
    background: url("../img/background.jpg");
    background-attachment: fixed;
    background-size: cover;
    min-height: 100vh;
.btn-primary {
    background-color: $primary;
    border-color: $primary;
    &:hover {
        background-color: rgba($primary, .8);
        border-color: $primary;
    &:active, &:focus {
        background-color: $primary!important;
    }
.btn, input {
    &:active, &:focus {
```

```
box-shadow: 0 0 0 0.2rem rgba($primary,.5)!important;
        border-color: $primary;
    }
.bg-light-trans {
    background: $light-transparent;
.button {
    background:rgba(0,0,0, .5);
    transition: all .3s;
    &:hover {
        background: rgba(0,0,0,.3);
.color-primary {
    color: $primary;
.max-width-400 {
    max-width: 400px;
a{
    color: $primary;
    &:hover {
        text-decoration: none!important;
    }
ul {
    list-style-type: none;
#header {
    z-index: 1000;
    height: 80px;
    #logo-title {
        color: $primary;
        font-size: 1.3rem;
        font-weight: 300;
    #logo-img {
        width: 50px;
    #menu-button {
        font-size: 1.4rem;
    #admin-panel {
        top: 82px;
        // height: 50px;
```

```
}
    nav {
        a{
            color: $primary;
            padding: 2px;
            &:hover, &.active {
                border-bottom: 1px solid $primary;
            }
    }
    #responsive-menu-wrapper {
        display: none;
        top: 80px;
        left: 0px;
        // z-index: 1000;
    }
main {
//HOME PAGE
#home {
   #slider-wrapper {
    #hero {
        z-index: 10;
            h1,p{
            color: #fff;
            background: rgba(0,0,0, .5);
            padding: 2px 5px;
            max-width: 70%;
        }
        @media screen and (max-width: 575px) {
            h1 {
                font-size: 1.2em;
            }
            p {
                font-size: .9em;
        }
    #slider {
        position: relative;
        .slick-slide img {
```

```
height: 100vh;
            object-fit: cover;
        .slick-prev, .slick-next {
            position: absolute;
            // top: 20px;
            background: rgba(0,0,0, .5);
            border-radius: 50%;
            padding: 7px 12px;
            z-index: 10;
            color: #fff;
        .slick-prev{
            left: 15px;
        }
        .slick-next {
            right: 15px;
    }
.page-image {
    height: 60vh;
    z-index: 10;
       h1,h2{
        color: #fff;
        background: rgba(0,0,0, .5);
        padding: 2px 5px;
        max-width: 70%;
    @media screen and (max-width: 575px) {
        h1 {
            font-size: 1.2em;
        }
        h2 {
            font-size: .9em;
    }
//LOGIN PAGE
#login {
    *{
        max-width: 500px;
    }
//REGISTER PAGE
```

```
#register {
   * {
       max-width: 500px;
   }
//SHOP PAGE
#shop {
   #shop-image {
        background-image: url("../img/shop-background.jpg");
        background-size: cover;
    #products-wrapper{
        max-width: 1500px;
        #max-price {
            // width: 100px;
        #search-products{
            border-radius: .25rem 0 0 .25rem;
        #search-products-btn{
            border-radius: 0 .25rem .25rem 0;
    }
    .product {
        &:hover {
            filter: brightness(80%);
    .products-page-link.active {
        background: $primary;
        color: #fff;
    #clear-filters {
        display: none;
//PRODUCT PAGE
#product {
   #add-to-cart-quantity{
       width: 45px;
//CART PAGE
#cart {
    .cart-item-quantity{
```

```
width: 60px;
//ADMIN PRODUCTS PAGE
#admin-products {
    input, select{
        border-radius: .25rem 0 0 .25rem;
    .btn.col-4{
        max-width: 60px;
        border-radius: 0 .25rem .25rem 0;
        height: calc(1.5em + .75rem + 2px);
    }
//ADMIN USERS PAGE
#admin-users {
   overflow-x: scroll;
   #search-users {
        width: 300px;
    #users, #users-wrapper {
        min-width: 900px;
        .show-change-pw, .show-remove-user {
            &.active {
                background: rgba($primary, .7)!important;
                border-color: transparent;
        .change-pw-container, .remove-user-container {
            display: none;
        }
        .user-info:nth-child(even) {
            background: rgba(0,0,0, .05);
    }
//ACCOUNT PAGE
#account {
   #change-pw-wrapper {
        input, .alert{
            max-width: 400px;
```

```
//CONTACT PAGE
#contact {
   *{
       max-width: 600px;
    }
//ADMIN MESSAGES PAGE
#admin-messages {
   *{
       max-width: 600px;
//POLL
#poll {
   *{
       max-width: 500px;
   }
//ADMIN POLL
#admin-poll {
   *{
       max-width: 500px;
footer {
   #footer-img {
       width: 50px;
    }
```

## 3.3 JavaScript

## 3.3.1 assets/js/main.js

```
const data = {};
$(document).ready(function(){
    loadMobileMenu();
    pageRelatedFeatures();
});
function ajaxData(url, method, data = {}){
    return new Promise((resolve, reject) => {
        $.ajax({
            url: url,
            method: method,
            dataType: "json",
            data: data,
            success: function(data){
                resolve(data);
            },
            error: function(xhr){
                reject("Error communicating with " + url + ", status: " + xhr.status);
                console.log(xhr);
        });
    });
function getNavHeight(){
    let navHeight = parseFloat($("#header").css("height"));
    let adminPanelHeight = 0;
    if($("#admin-panel").length){
        adminPanelHeight = parseFloat($("#admin-panel").css("height")) + 4;
    return navHeight + adminPanelHeight;
function loadMobileMenu(){
    $("#menu-button").click(function(){
        $("#responsive-menu-wrapper")
        .css("top",`${getNavHeight()}px`)
        .toggle(300);
    });
function loadMainContainerPosition(){
    $("main").css("top", `${getNavHeight() + 100}px`);
    $("footer")
        .css({"top":`${getNavHeight() + 100}px`})
        .removeClass("w-100 border-top")
```

```
.addClass("container mx-auto");
function pageRelatedFeatures(){
    if($("main#home").length){
        loadHomePage();
    else if($("main#login").length){
        loadLoginPage();
        loadMainContainerPosition();
    }
    else if($("main#register").length){
        loadRegisterPage();
        loadMainContainerPosition();
    else if($("main#shop").length){
        loadShopPage();
    else if($("main#product").length){
        loadProductPage();
        loadMainContainerPosition();
    else if($("main#cart").length){
        loadCartPage();
        loadMainContainerPosition();
    else if($("main#admin-products").length){
        loadAdminProductsPage();
        loadMainContainerPosition();
    else if($("main#admin-product-edit").length){
        loadAdminEditProductPage();
        loadMainContainerPosition();
    else if($("main#admin-users").length){
        loadAdminUsersPage();
        loadMainContainerPosition();
    else if($("main#account").length){
        loadAccountPage();
        loadMainContainerPosition();
    else if($("main#contact").length){
        loadContactPage();
        loadMainContainerPosition();
    else if($("main#admin-messages").length){
        loadMainContainerPosition();
```

```
else if($("main#poll").length){
        loadPoll();
        loadMainContainerPosition();
    else if($("main#admin-poll").length){
        loadMainContainerPosition();
    }
    else if($("main#author").length){
        loadMainContainerPosition();
    }
function loadHomePage(){
    $("#slider").slick({
        "prevArrow": "<a href='#!' class='slick-prev'><span class='fas fa-long-arrow-
alt-left'></span></a>",
        "nextArrow": "<a href='#!' class='slick-next'><span class='fas fa-long-arrow-
alt-right'></span></a>"
    });
    $(".fake-poll-button").click(function(e){
        e.preventDefault();
        $(".login-notice").remove();
        $(`
notice">You must <a href="login.php">login</a> or <a href="register.php">register</a> fi
rst.`)
            .hide()
            .insertAfter(this)
            .fadeIn();
    });
function loadLoginPage(){
    $("#login-form").submit(function(e){
        resetFormErrors();
        let regUsername = /^{w{3,30}};
        let regPw = /^(?=.*\p{Uppercase_Letter})(?=.*\p{Lowercase_Letter})(?=.*\d)(?=.{6
,})/u;
        testFormElement($("#username"), regUsername, 30);
        testFormElement($("#password"), regPw, 50);
        if(data.error){
            e.preventDefault();
    });
function loadRegisterPage(){
```

```
$("#register-form").submit(function(e){
                  resetFormErrors();
                  let regFullName = /^\p{Uppercase_Letter}\p{Letter}{1,14}(\s\p{Uppercase_Letter}\
p{Letter}{1,14}){1,3}$/u;
                  let regEmail = /^[a-z]((\.|-|_)?[a-z0-9]){2,}@[a-z]((\.|-)?[a-z0-9]+){2,}\.[a-z0-9]+){2,}.[a-z0-9]+){2,}.[a-z0-9]+){2,}.[a-z0-9]+){2,}.[a-z0-9]+){2,}.[a-z0-9]+){2,}.[a-z0-9]+){2,}.[a-z0-9]+){2,}.[a-z0-9]+){2,}.[a-z0-9]+){2,}.[a-z0-9]+){2,}.[a-z0-9]+){2,}.[a-z0-9]+){2,}.[a-z0-9]+){2,}.[a-z0-9]+){2,}.[a-z0-9]+){2,}.[a-z0-9]+){2,}.[a-z0-9]+){2,}.[a-z0-9]+){2,}.[a-z0-9]+){2,}.[a-z0-9]+){2,}.[a-z0-9]+){2,}.[a-z0-9]+){2,}.[a-z0-9]+]+[a-z0-9]+]+[a-z0-9]+]+[a-z0-9]+[a-z0-9]+]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0
z]{2,6}$/i;
                  let regUsername = /^{w{3,30}};
                  let regPw = /^(?=.*\p{Uppercase_Letter})(?=.*\p{Lowercase_Letter})(?=.*\d)(?=.{6
,})/u;
                  if($("#password-repeat").val() != $("#password").val()){
                           formError($("#password-repeat"), "Passwords do not match.");
                  if(!testFormElement($("#password"), regPw, 50, " Password should be at least 6 c
haracters long and contain at least one uppercase letter, one lowercase letter and one n
umber.")){
                           $("#password-repeat").val("");
                  testFormElement($("#username"), regUsername, 30, " Username should be at least 3
  characters long and contain only letters, numbers and symbol _");
                  testFormElement($("#full-
name"), regFullName, 50, " All words must begin with a capital letter.");
                  testFormElement($("#email"), regEmail, 50, " Use only letters, numbers and symbo
ls @.-_");
                  if(data.error){
                           e.preventDefault();
         });
function testFormElement(element, regex, length, message = ""){
         let elementName = $(element).data("title");
        if(!$(element).val()){
                  formError($(element), `Please input ${elementName}.`);
                  return false;
         else if($(element).val().length > length){
                  formError($(element), `Maximum characters for ${elementName}: ${length}`);
                  return false;
         else if(!regex.test($(element).val())){
                  formError($(element), `Please enter a valid ${elementName}.${message}`);
                  return false;
         return true;
function resetFormErrors(){
```

```
$(".form-error").remove();
   data.error = false;
function formError(element, message){
   $(`${message}`).insertAfter(element);
   data.error = true;
async function loadShopPage(){
   try {
       await loadProductsFilters("categories", "category_id", "category_name");
       await loadProductsFilters("brands", "brand_id", "brand_name");
       await loadProductsFilters("colors", "color_id", "color_name");
       loadProductsGrid();
       $(`#search-products, #sort-products, #paginate-products, #max-
price`).change(function(){
           loadProductsGrid();
       });
       $("#clear-filters").click(clearFilters);
   catch(c) {
       $("#products-grid").append(`
error">Can't fetch products. Please try again later.`);
       console.log(c);
   }
async function loadProductsFilters(name, idColumn, nameColumn) {
   data[name] = await ajaxData("models/get-data.php", "get", {"type": name});
   for(item of data[name]){
       $(`#${name}`).append(`
           <input class="form-check-input" type="checkbox" id="${name}-</pre>
${item[idColumn]}" value="${item[idColumn]}"/>
           <label class="form-check-label" for="${name}-${item[idColumn]}">
           ${item[nameColumn]}
           </label>
       `);
   $(`#${name} input`).change(function(){
       loadProductsGrid();
   });
function clearFilters(){
   $("#categories, #brands, #colors").find("input").prop("checked", false);
   $("#search-products, #max-price").val("");
   loadProductsGrid();
async function loadProductsGrid(pageNo = 1){
```

```
filterChangeDetector();
   let maxPrice = checkMaxPriceInput();
   let dataObj = {
       "type": "products",
       "max-price": maxPrice,
       "category": getCheckedFilters("categories"),
       "brand": getCheckedFilters("brands"),
       "color": getCheckedFilters("colors"),
       "search": $("#search-products").val(),
       "order": $("#sort-products").val(),
       "pagination": $("#paginate-products").val(),
       "page": String(pageNo)
   let response = await ajaxData("models/get-data.php", "get", dataObj);
   data.products = response.products;
   let noOfPages = response.pages;
   $("#pagination").html("");
   if(data.products.length){
       let html = "";
       for(product of data.products){
           let price = formatPrice(product.product_price);
           html += `<div class="product-wrapper col-12 col-md-6 col-lg-4 col-xl-3 p-2">
               <a class="product-link" href="product.php?id=${product.product id}">
                   <div class="product card border-0 rounded-0 text-dark text-center">
                       <img class="card-</pre>
img" src="assets/img/${product.product_image}" alt="${product.product_title}" />
                       <div class="card-body py-4 px-1">
                           <h3 class="card-title h5 font-weight-</pre>
light">${product.product_title}</h3>
                           ${price}
                       </div>
                   </div>
               </a>
           </div>`;
       $("#products-grid").html(html);
       if(noOfPages > 0) {
           paginateProducts(noOfPages, pageNo);
       }
    }
   else {
       $("#products-grid").html(`
light">There are no products for the selected criteria.`);
    }
function filterChangeDetector(){
```

```
let change = false;
    if($("#categories, #brands, #colors").find("input:checked").length){
        change = true;
    }
    else if ($("#search-products").val() + $("#max-price").val() != ""){
        change = true;
    if(change){
        $("#clear-filters").show();
    else {
        $("#clear-filters").hide();
function checkMaxPriceInput(){
    let maxPriceInput = $("#max-price").val();
    if(isNaN(maxPriceInput)){
        return "";
    else {
        return maxPriceInput;
function formatPrice(price){
    return Number(price).toLocaleString("en-US",{style: 'currency', currency: 'USD'});
function getCheckedFilters(name){
    let array = [];
    $(`#${name} input:checked`).each(function(){
        array.push($(this).val());
    });
    return array.join(",");
function paginateProducts(noOfPages, page){
    for(let i=1; i<=noOfPages; i++){</pre>
        $("#pagination").append(`<a href="#!" class="${page == i ? "active" : ""} produc</pre>
ts-page-link p-2 border">${i}</a>`);
        $(".products-page-link:last").click(function(){
            loadProductsGrid(i);
            $(window).scrollTop($("#shop-image").height()-50);
        });
    }
async function loadProductPage(){
    try {
        let response = await ajaxData("models/get-
data.php", "get", {"type": "products"});
```

```
data.products = response.products;
       loadProductInfo();
    catch(c) {
       $("#product").append(`
error">Can't fetch product. Please try again later.`);
       console.log(c);
    }
function loadProductInfo(){
    let productId = $("#product-name").data("product-id");
    let product = data.products.find(x => x.product id == productId);
    let price = formatPrice(product.product_price);
   $("#product-name").text(product.product title);
   $("#product-image")
        .attr("src", `assets/img/${product.product_image}`)
        .attr("alt", product.product title);
   $("#product-package").text(product.package_size);
   $("#product-color").text(product.color_name);
   $("#product-description").text(product_product_description);
   $("#product-price").text(price);
    if($("#add-to-cart-fake").length){
       $("#add-to-cart-fake").click(function(){
           $(".login-notice").remove();
           $(`
notice">You must <a href="login.php">login</a> or <a href="register.php">register</a> fi
rst.`)
               .hide()
               .insertAfter($(this).next())
               .fadeIn();
       });
   else {
       $("#add-to-cart").click(addToCart);
    }
async function addToCart(){
    let productId = $("#add-to-cart").data("product-id");
   let productQuantity = $("#add-to-cart-quantity").val();
    try {
       let response = await ajaxData("models/cart-
operations.php", "get", {"operation": "add", "id": productId, "quantity":productQuantity
});
       $(".success-message").remove();
       $(`
message">${response.message}`).hide().insertAfter($(this).next()).fadeIn().delay(150
0).fadeOut(500, function(){$(this).remove()});
```

```
}
    catch(c){
        $(".form-error").remove();
        formError($(this).next(), c.message);
        console.log(c);
async function loadCartPage(){
    try {
        data.cart = await ajaxData("models/cart-
operations.php", "get", {"operation": "get"});
        let response = await ajaxData("models/get-
data.php", "get", {"type": "products"});
        data.products = response.products;
        loadCartInfo();
    catch(c) {
        $("#cart").append(`
error">Can't fetch cart items. Please try again later.`);
        console.log(c);
    }
function loadCartInfo(){
   let html = "";
   if(data.cart.length){
        for(item of data.cart){
            let product = data.products.find(x => x.product_id == item.product_id);
            let price = formatPrice(Number(product.product price)*Number(item.quantity))
            html += 
            <div class="cart-item row m-0 containter-fluid align-items-center">
                <div class="col-4 col-md-2 p-2">
                    <img src="assets/img/${product.product_image}" class="img-</pre>
fluid" alt="${product.product title}"/>
                </div>
                <div class="col-8 col-md-5 p-2">
                    ${product.product_title}
                </div>
                <div class="col-7 col-md-3 p-2">
                    <input type="number" class="cart-item-quantity pl-2 pr-0 form-</pre>
control d-inline-block" min="1" data-product-
id="${product.product_id}" value="${item.quantity}" onchange="if (this.value<1) {this.va
lue=1;}"/>
                    <span class="color-primary ml-2 h5">${price}</span>
                </div>
                <div class="col-5 col-md-2 p-2 text-right">
                    <a href="#!" class="cart-item-remove btn btn-primary" data-product-</pre>
id="${product.product id}"><span class="fas fa-times"></span> Remove</a>
```

```
</div>
            </div>`;
        $("#cart-items").html(html);
       $(".cart-item-quantity").change(changeCartItemQuantity);
       $(".cart-item-remove").click(function(){
            removeCartItem($(this).data("product-id"));
        });
       insertCartTotal();
    }
    else {
        $("#cart-items").html(`
5">Your cart is empty. Visit our <a href="shop.php">shop</a> to add items.`);
       $("#cart-total").remove();
    }
function insertCartTotal(){
    let totalPrice = 0;
    for(item of data.cart){
        let unitPrice = data.products.find(x => x.product_id == item.product_id).product
 price;
        totalPrice += (Number(unitPrice) * Number(item.quantity));
   $("#cart-total").remove();
   $(`<div id="cart-total" class="mt-5">
        <div class="m-1 h5 font-weight-light">Total: <span id="cart-total-</pre>
price" class="color-primary h5">${formatPrice(totalPrice)}</span></div>
        <a href="#!" id="cart-checkout" class="btn btn-primary m-1"><span class="fas fa-
shopping-cart"></span> Checkout now</a>
        <a href="#!" id="clear-cart" class="btn btn-primary m-1"><span class="fas fa-
times"></span> Remove all</a>
    </div>`).insertAfter($("#cart-items"));
   $("#clear-cart").click(clearCart);
async function changeCartItemQuantity(){
   let id = $(this).data("product-id");
    let quantity = $(this).val();
   try {
        await ajaxData("models/cart-
operations.php", "get", {"operation": "set", "id": id, "quantity": quantity});
       let unitPrice = data.products.find(x => x.product id == id).product price;
       let qtyPrice = formatPrice(Number(unitPrice) * Number(quantity));
       $(this).next().text(`${qtyPrice}`);
       data.cart.find(x => x.product id == id).quantity = quantity;
        insertCartTotal();
```

```
catch(c){
        $(".form-error").remove();
        formError($(this).next(), "Error changing quantity.");
        console.log(c);
    }
async function removeCartItem(id){
   try {
        await ajaxData("models/cart-
operations.php", "get", {"operation":"remove", "id": id});
        data.cart = data.cart.filter(x => x.product_id != id);
        loadCartInfo();
    catch(c){
        $(".form-error").remove();
        formError($(this), "Error removing item.");
        console.log(c);
    }
async function clearCart(){
   try {
        await ajaxData("models/cart-operations.php", "get", {"operation":"remove-all"});
        data.cart = [];
        loadCartInfo();
    catch(c){
        $(".form-error").remove();
        formError($(this), "Error removing items.");
        console.log(c);
    }
function loadAdminProductsPage(){
   loadRemoveDataDDL("brands", "brand");
   loadRemoveDataDDL("categories", "category");
   loadRemoveDataDDL("colors", "color");
   $("#new-category-btn, #new-brand-btn, #new-color-btn").click(insertNewData);
   $("#remove-category-btn, #remove-brand-btn, #remove-color-btn").click(removeData);
async function loadRemoveDataDDL(type, nameBase){
   try{
        data[type] = await ajaxData("models/get-data.php", "get", {"type": type});
        $(`#${type}`).html("");
```

```
for(item of data[type]){
           let id = item[nameBase+"_id"];
           let name = item[nameBase+"_name"];
           $(`#${type}`).append(`<option value=${id}>${name}</option>`);
   catch(c){
       $("#admin-products").append(`
error">Can't fetch data. Try again later.`);
       console.log(c);
   }
async function insertNewData(){
   let name = $(this).prev().val();
   if(!/\p{Uppercase_Letter}[\p{Letter}&,\-\d]{1,30}/u.test(name)){
       $(".form-error, .insert-success").remove();
       formError(this, "  Name is invalid. It must begin with a capital lette
r.");
   else {
       let type = $(this).data("type");
       let columnName = $(this).prev().attr("id").split("-")[1]+"_name";
       try {
           let response = await ajaxData("models/insert-
data.php", "post", {"type":type, "name": name, "column-name":columnName});
           $(".form-error, .insert-success").remove();
           $(`
success">  ${response.message}`).insertAfter(this);
           $(this).prev().val("");
           loadRemoveDataDDL(type, columnName.split("_")[0]);
       }
       catch(c){
           $(".form-error, .insert-success").remove();
           formError($(this), "Error inserting item.");
           console.log(c);
async function removeData(){
   let id = $(this).prev().val();
   let type = $(this).data("type");
   let columnName = $(this).attr("id").split("-")[1]+"_id";
   console.log(columnName)
   try {
       let response = await ajaxData("models/delete-
data.php", "get", {"type":type, "id":id, "column-name":columnName});
       $(".form-error, .insert-success").remove();
```

```
$(`
5">${response.message}`).insertAfter(this);
        loadRemoveDataDDL(type, columnName.split("_")[0]);
   catch(c){
       $(".form-error, .insert-success").remove();
       formError($(this), "Error removing this item. You must remove all products of th
is type first.");
       console.log(c);
    }
function loadAdminEditProductPage(){
   $("#btn-submit").click(function(e){
       resetFormErrors();
       let regexTitle = /^\p{Uppercase Letter}.{4,99}$/u;
       let regexDescription = /^\p{Uppercase_Letter}.{19,999}$/u;
       let regexPrice = /^\d+\.\d+$/;
       testFormElement($("#product-
title"), regexTitle, 100, " Title should be between 5 and 100 characters long start with
a capital letter.");
       testFormElement($("#product-
description"), regexDescription, 1000, " Description should be between 20 and 1000 chara
cters long start with a capital letter.");
       testFormElement($("#product-
price"), regexPrice, 100, " Price must be in XX.XX format, use only numbers.");
       testFormElement($("#product-package"), /.{2,20}/, 20);
       let productImage = $("#product-image").val();
       if($("#product-operation").val()=="New" && productImage == ""){
           formError($("#product-
image"), "You must provide a product picture when creating a new product.");
       let allowedFormats = ["jpg", "jpeg", "gif", "png", "webp"];
       if(productImage != "" && !allowedFormats.includes(productImage.split(".").pop())
){
           formError($("#product-
image"), "Allowed formats for images are jpg, jpeg, gif, webp, png.");
       if(data.error){
           e.preventDefault();
       }
    });
```

```
function loadAdminUsersPage(){
    showAdminUserPanel();
    $("#search-users").on("keyup", insertUserData);
async function showAdminUserPanel(){
   try {
        data.users = await ajaxData("models/get-data.php", "get", {"type": "users"});
       insertUserData();
       $(".show-change-pw").click(function(){
            let id = $(this).data("id");
            $(`.change-pw-container[data-id=${id}]`).stop().toggle(200);
           $(this).toggleClass("active");
        });
       $(".show-remove-user").click(function(){
           let id = $(this).data("id");
            $(`.remove-user-container[data-id=${id}]`).stop().toggle(200);
            $(this).toggleClass("active");
       });
       $(".change-pw").click(adminChangeUserPassword);
       $(".remove-user").click(removeUser);
    catch(c){
       $("#admin-users").append(`
error">Can't fetch users. Try again later.`);
        console.log(c);
function insertUserData(){
   let search = $("#search-users").val();
   let filteredUsers = data.users;
    if(search != ""){
        filteredUsers = data.users.filter(x => x.username.includes(search) || x.email.in
cludes(search));
    }
    let html="";
    if(filteredUsers.length){
        for(user of filteredUsers){
           html += `
                <div class="user-info row m-0 py-3 align-items-center">
                    <div class="col-1 user-id">${user.user id}</div>
                    <div class="col-2 username">${user.username}</div>
```

```
<div class="col-3 user-email">${user.email}</div>
                    <div class="col-2 user-full-name">${user.full name}</div>
                    <div class="col-2 user-date-created">${user.date created}</div>
                    <div class="col-2 text-right">
                        <a href="#!" class="show-change-pw btn btn-primary" data-</pre>
id="${user.user_id}" class="btn btn-primary"><span class="fas fa-key"></span></a>
                        <a href="#!" class="show-remove-user btn btn-primary" data-</pre>
id="${user.user_id}" class="btn btn-primary"><span class="fas fa-trash"></span></a>
                    </div>
                    <div class="change-pw-container col-12 m-2 text-right" data-</pre>
id="${user.user id}">
                        <input type="password" placeholder="New password" class="form-</pre>
control d-inline w-25" data-title="password"/>
                        <a href="#!" class="change-pw btn btn-primary align-</pre>
baseline" data-id="${user.user_id}">Change</a>
                    </div>
                    <div class="remove-user-container col-12 m-2 text-right" data-</pre>
id="${user.user id}">
                        Are you sure you want to remove this user?
                        <a href="#!" class="remove-user btn btn-primary" data-</pre>
id="${user.user_id}">Remove</a>
                    </div>
                </div>`;
        }
    }
   else {
        html+= `No users found.`;
    $("#users").html(html);
async function adminChangeUserPassword(){
    resetFormErrors();
   $(".form-success").remove();
    let id = $(this).data("id");
   let newPw = $(this).prev().val();
    let regPw = /(?=.*\p{Uppercase Letter})(?=.*\p{Lowercase Letter})(?=.*\d)(?=.{6,50})
)/u;
    if(!regPw.test(newPw)){
        formError(this, "Password must be between 6 and 50 characters and contain 1 uppe
rcase, 1 lowercase letter and 1 number.");
   else{
        try{
            let response = await ajaxData("models/admin-change-
pw.php", "post", {"role":"Administrator", "id":id, "new-pw":newPw});
```

```
$(`
success">${response.message}`).hide().insertAfter(this).show(300);
            $(this).prev().val("");
       catch(c){
           $(".form-error").remove();
            formError($(this), "Error changing password. Try again later.");
            console.log(c);
async function removeUser(){
   let id = $(this).data("id");
   try{
        let response = await ajaxData("models/delete-
data.php", "get", {"type":"users", "id":id});
       $(this).parent().parent().remove();
       data.users = data.users.filter(x => x.user_id != id);
    catch(c){
       $(".form-error").remove();
        formError($(this), "Error removing user. Try again later.");
        console.log(c);
function loadAccountPage(){
   $("#btn-change-pw").click(userChangePassword);
function userChangePassword(e){
   resetFormErrors();
    data.error = false;
   let regPw = /^(?=.*\p{Uppercase_Letter})(?=.*\p{Lowercase_Letter})(?=.*\d)(?=.{6,50})
)/u;
   testFormElement($("#old-pw"), /./, 50);
    testFormElement($("#new-
pw"), regPw, 50, " Password should be at least 6 characters long and contain at least on
e uppercase letter, one lowercase letter and one number.");
    if($("#new-pw").val() != $("#confirm-pw").val()){
        formError($("#confirm-pw"), "Passwords don't match.");
```

```
}
            if(data.error){
                          e.preventDefault();
             }
function loadContactPage(){
            $("#btn-send").click(validateContactForm);
function validateContactForm(e){
            resetFormErrors();
            data.error=false;
            let regName = /^\p{Uppercase_Letter}\p{Letter}{1,14}(\s\p{Uppercase_Letter}\p{Letter
}{1,14}){0,3}$/u;
             let regEmail = /^[a-z]((\.|-|_)?[a-z0-9]){2,}@[a-z]((\.|-)?[a-z0-9]+){2,}\.[a-z0-9]+){2,}.[a-z0-9]+){2,}.[a-z0-9]+){2,}.[a-z0-9]+){2,}.[a-z0-9]+){2,}.[a-z0-9]+){2,}.[a-z0-9]+){2,}.[a-z0-9]+){2,}.[a-z0-9]+){2,}.[a-z0-9]+){2,}.[a-z0-9]+){2,}.[a-z0-9]+){2,}.[a-z0-9]+){2,}.[a-z0-9]+){2,}.[a-z0-9]+){2,}.[a-z0-9]+){2,}.[a-z0-9]+){2,}.[a-z0-9]+){2,}.[a-z0-9]+){2,}.[a-z0-9]+){2,}.[a-z0-9]+){2,}.[a-z0-9]+){2,}.[a-z0-9]+){2,}.[a-z0-9]+]+[a-z0-9]+]+[a-z0-9]+]+[a-z0-9]+[a-z0-9]+]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0-9]+[a-z0
z]{2,6}$/i;
            testFormElement($("#name"), regName, 50, " All words must begin with a capital lette
            testFormElement($("#email"), regEmail, 50, " Use only letters, numbers and symbols @
            testFormElement($("#message"), /^.{20,1000}$/, 1000, " Message should be at least 20
   characters long.");
            if(data.error){
                          e.preventDefault();
function loadPoll(){
            $("#btn-vote").click(function(e){
                          resetFormErrors();
                          if($("#poll input:radio:checked").length == 0){
                                       formError(this, "You must choose an answer.");
                                       e.preventDefault();
             });
```